Rulemaking Files - Statement of Reason

Index to Rulemaking File Underground Storage Tank Regulations Title 23, Waters Division 3, Water Resources Control Board Chapter 16, Underground Storage Tank Regulations 1985

(e) Language is moved from section 2662(b)(4) with no substantive change.

SOR

Section 2663.

This new section is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade. Under existing regulations, lining was covered under the same section as repairs, regardless of whether the lining was a preventive measure or an upgrade. This new section clarifies general lining requirements for both repairs and upgrades.

(a) This subsection is a rewording of section 2661(a) of the existing regulations. No substantive change is made except to specify an existing requirement of section 25296 H&SC. This section prohibits tank owners from repairing a tank by lining it if the tank was already repaired by lining.

(b) This language is moved from section 2661(c). Amendments were made to specify those circumstances which require an evaluation by a special inspector. The amendments also specify that written certification of the evaluations shall be provided to the LIA. This subsection is also reorganized so that it clearly outlines the evaluations and tests that must be performed by a special inspector as well as the steps that must be performed in the event that a tank fails one of the evaluations or tests. The evaluations performed by a special inspector must be completed and written certification provided to the LIA before lining a tank. It is unnecessary to perform the vacuum test before the tank has been lined to ensure structural integrity of the tank. Consequently, the vacuum test requirement is moved from section 2661(c) to sections 2663(f) and 2663(h).

(c) Language is moved from section 2661(d) with no substantive change.

(d) This amendment requires thin areas or other flaws to be reinforced or patched as needed before lining. After cleaning, sandblasting, and inspecting the tank's interior, thin areas or other flaws may be discovered. Although the tank may pass the evaluations and still be considered suitable for lining, it should be reinforced as needed to ensure that the flaws will not cause an unauthorized release.

(e) This language is moved from subsection 2661(h) with no substantive change. Existing language states that the provisions become effective one year after the effective date of the regulations. Now that the date has passed, the date is stated for clarity.

(f) This language is taken from sections 2661(k) and 2662(b)(3) and reworded to reflect reorganization with no substantive change. The requirement for a

vacuum test was deleted from section 2661(c) and added to this subsection. The purpose of the vacuum test is to ensure that the lining has properly bonded to the tank. Also, the requirements for thickness, hardness, and electrical holiday resistor tests have been added because these tests are specified in tank lining industry codes and practices.

(g) The requirement for a tank integrity test after lining is taken from section 2661(n) of existing regulations. However, the test is no longer due within 30 days following the lining. The tank test is required before the tank is returned to service (before a hazardous substance is stored). Some owners may have valid reasons for needing more than 30 days to conduct a tank integrity test. As long as the test is conducted prior to hazardous substance storage, the environment is protected.

(h) This language is taken from sections 2661(k) and 2662(b)(3) and reworded to reflect reorganization with no substantive change. The requirement for a vacuum test was deleted from section 2661(c) and added to this subsection. The purpose of the vacuum test is to ensure that the lining has properly bonded to the tank. Also, the requirements for thickness, hardness, and electrical holiday resistor tests have been added because these tests are specified in tank lining industry codes and practices. Finally, criteria for the steel thickness test is changed so that average tank metal thickness must be greater than 75% of the original tank wall thickness. This change is consistent with industry codes and practices.

Section 2664.

For better organization, the requirements for upgrading tanks by installing bladder systems has been moved to this new section. The amendments provide additional methods by which an existing tank without secondary containment can be upgraded to satisfy the requirements in section 2662. Retrofitting an existing tank with a bladder system must meet applicable requirements of Article 3.

An existing single-walled tank retrofitted with a bladder system according to the criteria in section 2664 provides both primary and secondary levels of containment as well as interstitial monitoring.

(a) Bladder systems are restricted to motor vehicle fuel tanks only because their performance is still unproven in USTs; these systems involve a relatively new technology. Several LIAs have expressed concern that bladder systems may not be safe to store some chemicals.

(b) Since the bladder system becomes the primary container for the tank, bladder

Dave -

Regs

not answered

In regs - need to remove definition of storm water collection - it doesn't fit w/ wording in exemption in 2621(a)(10)

SOR

2640 - (c) missing - Barbara, didn't you make these changes in the regs?

done 2643 (b)(1)(4) "same as (1) above"? (2)? OK

done 2650 (e)(1) missing - Terry

done 2663 need (a) - Aaron took existing one out

done 2664(e) where in existing lang?

done 2671 (d) where in fed regs?

tanks + catch basins desig 4 storm water collect

STATE OF CALIFORNIA - CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, *Governor*

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INITIAL STATEMENT OF REASONS

CALIFORNIA CODE OF REGULATIONS
TITLE 23, WATERS
DIVISION 3, WATER RESOURCES CONTROL BOARD

CHAPTER 16, UNDERGROUND STORAGE TANK REGULATIONS

APRIL 1993

INITIAL STATEMENT OF REASONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). Chapter 6.7 prohibits any person from owning or operating an UST used for the storage of hazardous substances without a permit issued to the owner by a designated local agency and provides for implementation of UST construction and monitoring requirements. The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

These regulations originally became effective in August 1985 and were subsequently amended on August 9, 1991.

Proposed Changes to Regulations

The proposed amendments to the underground storage tank regulations include substantive changes and changes made for clarification. The changes do not mandate prescriptive standards referenced in section 11346.14 of the Government Code. The specific purpose of each proposed change is explained. The factual basis explains the reasons for the State Water Board's determination that the amendment is necessary.

There are several nonsubstantive, editorial changes. They include changes for grammar, punctuation, clarity, and renumbering or relettering subsections. For example, "Of this chapter," "of this article," "of this section," and "at a minimum" are removed in most cases because they do not add to the meaning of the text and often make the language cumbersome. Grammatical and editorial amendments are too numerous to itemize.

Additions to existing text are underlined and deletions are struck out.

Article 1. Definition of Terms

Section 2610 - Definitions/Applicability of Definitions

Specific Purpose and Factual Basis

This amendment removes the terms "hazardous substance," "operator," and "person" from the list of terms in section 2610 because the terms are being added to the list of definitions in section 2611.

Section 2611 - Additional Definitions

Specific Purpose and Factual Basis

Bladder system - The definition of "bladder system" is added to describe a new method of upgrading an underground storage tank. The term is used in the language in Article 6, "Repair and Upgrade Requirements."

Decommissioned tank - The definition of "decommissioned tank" is added to describe an UST which is no longer in service and which has been rendered incapable of being put back into service. The term is used in Article 7.

Existing underground storage tank - The definition of an existing underground storage tank is intended to define not only those tanks installed before January 1, 1984, but to include certain tanks installed on and after that date. If a tank was exempt by virtue of its use when it was installed before January 1, 1984, but then became regulated because of a change in the use, it is also an "existing tank." The amendment clarifies this intent.

Proposed language expands the definition by including tanks installed after January 1, 1984, which were exempt at the time of installation, but by virtue of their use, are now regulated.

Hazardous substance - The definition of "hazardous substance" is in section 25281(f) H&SC. This definition states that a substance is hazardous when it meets both the criteria in subsections (1) and (2). A definition is added to the regulations to clarify the intent of the statute: a substance is hazardous when it meets either of the criteria in subsections (1) or (2) of section 25281(f) H&SC.

Hydraulic lift tank - This definition is removed because this type of tank is no longer exempt from regulations.

Leak threshold - The definition of "leak threshold" is added to describe a value against which test measurements are compared during a tank or pipeline test. The term is used in new language in section 2643(j) to identify requirements for automatic tank gauging systems installed after 1995.

A tank or pipeline test method which has been evaluated by a third party according to EPA protocol to meet a certain performance standard within a specified range of probability of detection and probability of false alarm would have a leak threshold which is smaller than the specified performance standard. For example, the performance standard of 0.1 gallons

per hour (gph) with at least a 95% probability of detection and not more than a 5% probability of false alarm would have a leak threshold which is generally smaller than 0.1 gph (i.e., 0.05 gph). The 0.1 gph is the performance standard leak rate and the 0.05 gph is the leak threshold. Therefore, if a measured leak rate for a tank or piping during a tightness test exceeds the 0.05 gph value, there is at least 95 percent chance that the tank or piping is leaking at 0.1 gph or higher.

Manual inventory reconciliation - The definition of "manual inventory reconciliation" is added to distinguish this inventory monitoring method from a newly approved monitoring method called "statistical inventory reconciliation" (SIR). Existing language refers simply to "inventory reconciliation" without modifying the term. Both manual and statistical inventory reconciliation are covered in Article 4.

New underground storage tank - Regulations in this chapter refer to tanks as "new" or "existing." This definition is amended to clarify the criteria used to determine whether an underground storage tank is considered "new".

Existing language contains amendment dates which are confusing and unnecessary; those are removed.

Existing language has also caused confusion because it implies that in order to be considered "new," a tank must be installed under permit from a local agency. New tanks include those installed without a permit; therefore, the reference to a permit is removed.

There are two types of underground storage tanks that meet the definition of "new". 1) A tank installed on and after January 1, 1984 and subject to the regulations at the time of installation; and, 2) A tank that was installed on or after January 1, 1984 in compliance with the requirements of Article 3 even though it was not subject to the regulations at the time of installation. The amendment makes this intent clear.

Operator - The definition of "operator" is added to clarify the statutory definition in section 25281(h) H&SC which defines "operator" as a person who has "... daily responsibility for, the daily operation of an underground storage tank system" (emphasis added). This definition has caused confusion about who is considered the operator of a tank. For example, by saying that the operator has "daily responsibility," it is implied that a gas station attendant, who is daily responsible for what happens at the station, is the operator. This is not the intent of federal regulations or state statutes. Removing the reference to "daily responsibility" and saying instead, "responsibility for the daily operation" clarifies federal and state intent and makes the definition consistent with language in section 25299.19 of

Chapter 6.75 H&SC (Petroleum Underground Storage Tank Cleanup regulations) and 40 CFR 280.12.

Person - The definition of "person" in section 25281(j) H&SC does not specifically include "consortium," "joint venture," and "commercial entity," which are included in the definition in section 9001(6) of RCRA (42 USC section 6901 et seq.) In addition, the definition could be interpreted to include only certain political subdivisions of California and not the following entities that are specifically included under section 1004(15) of RCRA: any interstate body, all municipalities, commissions, and political subdivisions of California, other states and the political subdivisions of these states. The definition of "person" in section 25281(j) was legislatively intended to mirror the definition of "person" in RCRA. The proposed definition of "person" in this section clarifies federal and legislative intent without quoting the language in RCRA.

Statistical inventory reconciliation - This is a new definition. See statement of reasons in this section for "manual inventory reconciliation."

Wastewater treatment tank - A definition of wastewater treatment tank is necessary in these regulations because it is listed under exemptions in section 2621. However, the current definition states that a wastewater treatment tank is an "underground storage tank..." By definition, an underground storage tank is one which is regulated. Therefore, the reference to underground storage tank is incorrect and is removed.

This amendment clarifies the definition of a wastewater treatment tank to make it consistent with the definition in section 13625 of the Water Code.

Article 2. General Provisions

Section 2620 - General Intent, Content, Applicability, and Implementation

The word "standard" is changed to "requirement" throughout this article because "standard" does not accurately describe the purpose of a regulation. A standard is a measurement of comparison; a requirement is a prerequisite. These regulations are prerequisites for tank owners and operators.

Section 2621 - Exemptions

Specific Purpose

Section 2621(a) - This amendment specifies that any underground storage tank which is regulated by the federal government is not exempt from state regulations.

Factual Basis

The universe of underground storage tanks covered under state law differs, in some cases, from those covered under federal law. The proposed amendment prevents state regulations from inadvertently exempting tanks regulated by federal regulations.

Specific Purpose

Existing Section 2621(a)(3) - The purpose of this amendment is to remove the exemption for all hydraulic lift tanks from regulations.

Factual Basis

Chapter 6.7 H&SC does not exempt hydraulic lift tanks; therefore no authority exists for an exemption in regulations.

Specific Purpose and Factual Basis

New Section 2621(a)(3) - Section 25283.5 H&SC was amended to exempt tanks located in vaults or basements if certain conditions exist. The proposed amendment implements and clarifies this statutory change.

Specific Purpose

Section 2621(a)(9) - This amendment specifies that pipelines connected to regulated tanks which are located in refineries or oil fields are not exempt from regulation.

Factual Basis

Existing language exempts pipelines located in refineries or oil fields. The intent was to exempt large pipelines used in the operation of the refineries or oil fields. It was never intended to exempt pipelines connected to regulated tanks.

Specific Purpose and Factual Basis

Section 2621(a)(14) - This amendment changes a reference from Department of Health Services (DHS) to Department of Toxic Substances Control (DTSC). The responsibility for issuing

hazardous waste facilities permits was transferred from DHS to DTSC on July 17, 1991.

Specific Purpose

Section 2621(c) - This subsection is amended and subdivision (c)(2) is deleted to clarify existing language and removes the requirement for owners of exempt tanks to close their tanks according to requirements for regulated tanks as set forth in Article 7.

Factual Basis

Existing language in this section requires exempt tanks to be closed in accordance with requirements for regulated tanks. A legislative counsel opinion dated August 26, 1991, indicates that this was not the legislative intent and that when the owner of an exempt tank as defined in section 25281(x)(2) H&SC, abandons the tank, the owner should not be required to comply with Chapter 6.7 H&SC. An exempt tank does not fall within the definition of an underground storage tank in section 25281 H&SC and its status as an exempt tank should not change upon discontinuance of use.

Article 3. New Underground Storage Tank Construction and Monitoring Requirements

Specific Purpose and Factual Basis

In the title of this article, "Standards" has been replaced by "Requirements" because "standards" does not accurately reflect the purpose of the regulation. A standard is a measurement of comparison; a requirement is a prerequisite. These regulations are prerequisites for tank owners and operators.

Section 2630 - General Applicability of Article

Specific Purpose and Factual Basis

Section 2630(a)-(c) - The amendments to these subsections are editorial only.

Specific Purpose

Section 2630(d) - This new subsection specifies that new monitoring equipment must be installed, calibrated, operated, and maintained in accordance with manufacturers' instructions.

Factual Basis

This requirement currently exists in section 2641(i) (new subsection [j]) of Article 4 for existing monitoring equipment. The original intent was for requirement to apply to both existing and new monitoring equipment. Therefore, the requirement is being added to this article covering new monitoring equipment.

Section 2631 - Design and Construction Requirements for New Underground Storage Tanks

Specific Purpose and Factual Basis

The provisions of this section pertain to construction and design requirements for new USTs. The title of the section was changed to reflect the scope of the section. See statement of reasons under Article 3 for the reason for changing "standards" to "requirements."

Specific Purpose

Section 2631(a) - This amendment requires new primary containment to be product tight.

Factual Basis

Section 25291 H&SC requires new primary containment to be product tight and the definition of "product-tight" is in section 25281 H&SC. It is important to repeat the requirement here so that this article includes all requirements for primary containment.

Specific Purpose

Section 2631(b) - This subsection is amended to require that all primary containment including any integral secondary containment and any other components used to construct the primary containment be approved by an independent testing organization, in accordance with voluntary consensus standards, engineering standards, or industry codes.

Factual Basis

Existing language requires that all equipment and components that go into the design and construction of USTs must be in accordance with an industry code or engineering standard approved by an independent testing organization. In fact, independent testing organizations do not approve standards, they approve equipment to determine whether it meets codes or standards. (See also statement of reasons for section 2631(d)(6), below.)

Existing language requires components to be approved by July 1, 1992. However, there have been few evaluations of components to

date. The compliance date is moved to January 1, 1995 to allow the State Water Board to remind the regulated public in writing of the requirement and to allow enough time for manufacturers of components to obtain the evaluations.

Specific Purpose

Section 2631(d) - This subsection is amended to clarify that it applies only to secondary containment systems which are not part of a primary containment system. The amendment also removes reference to vaults.

Factual Basis

Secondary containment systems which are an integral part of (built right into) the primary containment system are covered in subsection (a). The provisions in subsection (d) apply only to those secondary containment systems which are not an integral part of the primary system.

The word, "vault," is deleted because some members of the regulated community incorrectly believed that since vaults were specified in the language, the provisions applied only to vaults. There are other forms of secondary containment such as trenches and double-walled pipes; however, no specific reference is made to any type of secondary containment to avoid confusion in the future.

Specific Purpose

Section 2631(d)(6) - The term, "approved" replaces "certified."

Factual Basis

There are several independent testing organizations which evaluate UST system equipment and components to determine whether they meet industry codes, voluntary consensus standards, or engineering standards. Once the equipment is determined to meet those standards, it may be "listed" by one testing organization, "labeled" by another or "certified" by another. Because there are several approval methods, the regulations are amended to avoid naming some methods and excluding others.

Specific Purpose

Section 2631(h) - The purpose of this amendment is to specify that for tanks which store non-petroleum hazardous substances, the secondary containment system must completely surround the primary containment system.

Factual Basis

This change will prohibit the storage of non-petroleum hazardous substances in open-top secondary containment systems. The amendment was made to make the requirement as stringent as federal regulations (see CFR section 280.42(b)(3)(iii). State regulations must be as stringent as federal regulations in order to receive state program approval from EPA. Section 25299.7(c) H&SC states that the board shall adopt any regulations necessary to obtain state program approval pursuant to Section 6991c of Title 42 of the United States Code.

Specific Purpose and Factual Basis

Section 2631(i) - This section is added to state specifically that if a tank is constructed according to the requirements in section 2631, it must be monitored according to the requirements of section 2632. It is added to complete the information in section 2631.

Section 2632 - Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

Specific Purpose and Factual Basis

The title of this section is changed to clarify topics covered in the section.

Specific Purpose and Factual Basis

Section 2632(c)(1) - The phrase, "...which relies on the visual monitoring of the primary containment system..." is deleted because reference to primary containment system is already stated in subdivision (c). This amendment makes the wording less cumbersome.

Specific Purpose

Section 2632(c)(1)(D) - This subdivision is rewritten and reorganized for clarity in addition to the following substantive changes. Existing language refers to observation of liquid around or beneath an underground storage tank. The amendment changes "tank" to "primary containment system."

The owner or operator is no longer required to conduct a tank integrity test unless it is necessary to determine if a leak exists.

The requirement to remove all hazardous substances from the tank and secondary containment system is removed.

Factual Basis

Section 2632 covers interstitial space monitoring requirements. Subsection (c)(1) covers requirements for visually monitoring the interstitial space of a primary containment system, not an underground storage tank.

The requirement to obtain a tank tightness test is removed for the following reasons: 1) There may be circumstances where a leak is obvious and it is not necessary to conduct a tank integrity test; 2) To require the test when none is needed is an unnecessary financial burden on the tank owner; 3) The delay caused by scheduling the tightness test would allow the system to continue to leak unnecessarily; and 4) Many tank tightness test methods require the tank to be full or almost full. Filling a leaking tank with a hazardous substance in order to conduct a test is adding to the problem and not solving it.

The requirement to remove all hazardous substances from the tank and the secondary containment system may be unnecessary. For instance, if the leak is due to loose connections in the piping, emptying the substance from the tank would not be necessary to stop the leak.

By stating that if a leak is confirmed, the owner or operator must comply with the requirements of Article 5, the necessary reporting and abatement steps are in place. Then if the tank owner wishes to continue to use the tank, repair requirements are in Article 6.

Specific Purpose and Factual Basis

Section 2632(c)(2) - The type of monitoring system covered by this subdivision is specified by adding "mechanical or electronic..". This distinguishes the subdivision from (1) which covers visual monitoring.

Specific Purpose

Section 2632(c)(2)(C) - The phrase, "in the interstitial space" is added to clarify the example given for methods of monitoring where the presence of hazardous substance is not determined directly.

Factual Basis

Although the language in the opening statement of this subsection (section 2632[c][2]) specifically refers to the requirements for monitoring interstitial space, there has been misinterpretation by the regulated community. Some have misread the language to mean that subsection (c)(2)(C) permits the use of in-tank monitors.

Specific Purpose and Factual Basis

Existing section 2632(d) - Provisions of existing section 2632(d) are moved to new section 2636(h) for better organization of piping requirements. The remaining subsections of 2632 are relettered accordingly.

Specific Purpose

Section 2632(e) - This new subsection specifies the steps an owner or operator must take if, during implementation of a monitoring system, it is discovered that an unauthorized release may have occurred.

Factual Basis

Section 2641(k) requires owners or operators of existing underground storage tanks to cease installation of monitoring systems and to comply with provisions of Article 5 if an unauthorized release is suspected. The same requirement is necessary for owners and operators of new tanks.

Section 2633 - Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

Specific Purpose and Factual Basis

See statement of reasons under Article 3 for the reason "standards" is changed to "requirements". Other changes made in the title of the section are made for clarity.

Specific Purpose and Factual Basis

Section 2633(a) - The amendments to this subsection are nonsubstantive; the language has been reworded for clarity. Reference to, "...in lieu of those specified in section 2632 of this article." is deleted as unnecessary.

Specific Purpose and Factual Basis

Sections 2633(b)(c)(e)(f) - The amendments to these subsections are nonsubstantive.

Specific Purpose

Section 2633(d) - This amendment replaces "containment system" with "leak interception and detection system."

Factual Basis

"Leak interception system" is the more accurate term. The amendment does not change the meaning of the subsection.

Section 2634 - Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

Specific Purpose and Factual Basis

The title of this section has been changed to identify which tanks may be monitored using the methods and equipment in this section. See statement of reasons under Article 3 for the reason for changing "standards" to "requirements."

Specific Purpose

Section 2634(a) - This new subsection introduces the section and clarifies the fact that the provisions apply only to tanks constructed pursuant to section 2633 (tanks which contain motor vehicle fuel only).

Specific Purpose and Factual Basis

Section 2634(b) - This new subsection requires owners and operators to obtain local agency approval for their monitoring programs. This is consistent with the requirements in section 2632(b) for owners and operators of tanks built according to that section.

Specific Purpose and Factual Basis

Section 2634(c)(3) - Reference to sections covering piping requirements is amended to reflect the fact that those requirements are now in section 2636.

The word, "pressurized" has been deleted because section 2636 covers all piping.

Specific Purpose and Factual Basis

Section 2634(d)(1) - "Leak interception and detection system" is deleted because it is redundant. The remainder of the subdivision is reworded for clarity without changing the meaning.

Specific Purpose

Section 2634(d)(1)(A) and (B) - The language in these subdivisions is reworded for clarity. In subsection (B), a requirement is added for owners or operators who choose to implement a manual monitoring program. The efficiency of the

manual monitoring system must be demonstrated to the local agency before implementing the program.

Factual Basis

There is no definition for manual monitoring and no way to prescribe procedures because the method may vary from tank to tank. The local agency is able to make a judgment about manual monitoring methods by visiting the site and evaluating the efficiency of a manual monitoring system.

Section 25283(a) H&SC authorizes the State Water Board to develop regulations which delegate implementation of the UST program to local agencies. This is one case where the local agency, by its proximity to the situation, is better able to make a decision about a proposed monitoring program.

Specific Purpose and Factual Basis

Section 2634(d)(2) - Existing language lists the required contents of a written procedure for routine monitoring, but does not specify who must prepare the procedure. Because the owner or operator is responsible for the monitoring plan, that person should also prepare written procedures.

Section 2635 - Installation and Testing Requirements for New Underground Storage Tanks and Piping

Specific Purpose

Section 2635(a)(1) - This amendment specifies that tests conducted on tanks shall determine whether the tanks meet industry codes.

Factual Basis

Existing language in this subdivision implies that the tests, rather than the tanks must be in accordance with industry codes.

Specific Purpose and Factual Basis

Section 2635(a)(2)(B) - The word "job" is changed to "installation" to more accurately describe the location where tanks must be tested.

Specific Purpose and Factual Basis

Section 2635(a)(3) - The word, "tightness" is added to make clear the type of test under discussion. The word, "remanufactured" is deleted because it means the same thing as repaired. The fact that a repaired or replaced tank is required to be tested before

installation is made more clear by placing it in a separate sentence and rewording the language.

Specific Purpose and Factual Basis

Existing section 2635(b) - The provisions of this subsection which covers piping, have been moved to section 2636.

Specific Purpose

Section 2635(b)(1) - "Tank filling" is changed to "product delivery" to more accurately describe the act of putting product into a tank.

Factual Basis

Tanks which have product delivered are not necessarily filled.

Specific Purpose and Factual Basis

Section 2635(b)(1)(C) - This amendment deletes the adjective, "spring-loaded" from "drain valve." It also provides an option for meeting the requirement to keep the spill container empty.

Factual Basis

Some drain valves are not equipped with springs, but they serve the same purpose as a spring-loaded drain valve. Since the objective here is to make sure any spilled product goes back into the primary container, the regulatory language must allow for whatever technology would meet that goal.

Specific Purpose and Factual Basis

Section 2635(d) - Existing language refers readers to Appendix VI without identifying the appendix. This amendment identifies the form which owners and operators are required to complete.

Specific Purpose

Section 2635(d)(1) - Existing language specifies that an installer of underground tanks must be trained and certified by tank and piping manufacturers. This amendment requires a the installer to obtain a certificate of training, but does not require that the installer be certified.

Factual Basis

The manufacturer does not certify the installer, but issues a certificate of training.

Section 2636 - Design, Installation, Testing, and Monitoring Requirements for Piping

This is a new section. The provisions for piping requirements in sections 2632(d) and 2635(b)(1) - through (7) have been moved to this section for better organization.

Specific Purpose

Section 2636(a) - This new subsection states that piping connected to a tank which was installed after July 1, 1987 must have secondary containment.

Factual Basis

Section 25291(a)(7)(E) H&SC makes this requirement; however, to complete this section regarding piping, the requirement is added to introduce the section.

Specific Purpose and Factual Basis

Section 2636(b) - Language in this subsection is moved from existing section 2635(b)(6) and edited slightly for clarity.

Specific Purpose and Factual Basis

Section 2636(c) - Language in this subsection is moved from existing section 2635(b)(7) and edited slightly for clarity.

Specific Purpose

Section 2636(d) - Language in this subsection is moved from existing section 2635(b) and edited slightly for clarity.

Factual Basis

Regulations do not currently contain provisions for suction and gravity flow piping. An overfilled volumetric test is the only method by which these tanks can be tested.

Specific Purpose and Factual Basis

Section 2636(e) - Language in this subsection is moved from existing section 2632(d) and 2635(b)(5) and edited slightly for clarity.

Specific Purpose and Factual Basis

Section 2636(f) - Language in this subsection is moved from existing section 2635(b)(3) and edited slightly for clarity.

Specific Purpose and Factual Basis

Section 2636(g) - This language was moved from existing section 2635(b)(4). This amendment also clarifies that the minimum test pressure requirement is only applicable to pressurized piping. New language is also added to (g)(4) which provides an option for testing suction and gravity flow piping which cannot be isolated from the tank.

Section 2636(h) - This language was moved from existing section 2632(d)

Section 2636(i) - Language in this subsection is moved from existing section 2635(b)(5)(A) through (D) and edited slightly for clarity.

Section 2636(i)(5) - Language in this subdivision is moved from section 2635(b)(5)(D) and edited slightly for clarity.

Article 4. Existing Underground Storage Tank Monitoring Requirements

Specific Purpose

Sections 2640(a), 2641(a), 2642(a), and 2644(a) and (d), 2647, 2648, and 2649

"Operator" is added to language to specify that they are responsible for implementation of a monitoring plan for underground storage tanks.

Factual Basis

The tank owner is not always the one who operates the underground storage tank. Section 25292(a) H&SC states that the operator shall monitor the tank system, which, of course, also applies to the owner if the owner is the operator.

Specific Purpose

Section 2640(c) - Existing language states that Article 4 does not apply to tanks installed and monitored in accordance with sections 2631 through 2634. New language adds tanks that are designed and constructed in accordance with the same sections.

Factual Basis

The above four mentioned sections are in Article 3 which applies only to new tanks. Article 4 applies to existing tanks (those

installed before January 1, 1984). Sections 2631 through 2634 cover not only installation and monitoring requirements but also design and construction requirements. The proposed change does not add new requirements, but makes the language more descriptive.

Section 2641 - Monitoring Program Requirements

Specific Purpose and Factual Basis

Section 2641(a) - The reference to exemptions for piping is moved from subsection (a) to subsection (b) because (b) refers to exemptions. Reference to underground storage tanks located on a farm is added because existing language does not refer to these tanks which are covered in existing Appendix III.

Specific Purpose

Section 2641(h) - This amendment requires owners or operators of existing underground storage tanks to maintain a written monitoring procedure and response plan set forth in section 2632(d) for new tanks as part of their monitoring programs.

Factual Basis

Section 2632(d) requires owners and operators of new tanks to maintain written monitoring procedures. The same requirement is also necessary for existing tanks. Unless these procedures are in writing, local agencies cannot determine whether the plan meets local agency requirements.

Specific Purpose

Section 2641(i) - Language in existing section 2641(h) requires a tank to be repaired or closed if the owner or operator does not obtain prompt approval from the local agency for a monitoring program. This amendment adds the option to replace or upgrade the tank. This subsection has also been reworded for clarity.

Factual Basis

A repaired tank may not necessarily meet the requirements of the local agency in obtaining approval for monitoring. The tank may need to be replaced with a new tank or upgraded with secondary containment so that approval may be obtained.

Specific Purpose

Section 2641(l) - Existing language requires owners and operators to comply with Articles 5, 6, and 7 if, during implementation of a monitoring program, an unauthorized release is suspected. The

amendment would require compliance if any condition indicated a release.

Factual Basis

There are indicators other than implementation of the monitoring program which suggest that an unauthorized release has occurred, such as the presence of free product or detection of vapors.

Section 2642 - Visual Monitoring

Specific Purpose

Section 2642(b) and (c) - This language was reworded for clarity and the requirement to have a tank integrity test is modified. The test is required only if necessary to determine if there has been a leak.

Factual Basis

The requirement to obtain a tank tightness test is modified for the following reasons: 1) There are circumstances where a leak is obvious and it is not necessary to conduct a tank integrity test (observing product drip from the tank or piping is an example of an obvious leak); 2) To require the test when none is needed is an unnecessary financial burden on the tank owner; 3) The delay caused by scheduling the tightness test would allow the system to continue to leak unnecessarily; and 4) Many tank tightness test methods require the tank to be full or almost full. Filling a *leaking tank with a hazardous substance in order to conduct a* test is adding to the problem and not solving it.

Specific Purpose and Factual Basis

Existing section 2642(c) - This subsection is deleted because the provisions are incorporated in new subsection (b).

Section 2643 - Nonvisual Quantitative Monitoring Methods

Specific Purpose and Factual Basis

The title of the section is a non-substantive change for clarity: See statement of reasons for Article 3 for the reason "standard" is changed to "requirement" throughout Article 4.

Specific Purpose and Factual Basis

Sections 2643(a) and (b) - The provisions of existing language in (a) and (b) are combined in (a) and are reworded for clarity. Gravity-flow piping is added to the list of topics covered in this section.

Specific Purpose and Factual Basis

Section 2643(b) - Language in existing subsection (c) states that "at least one" of the listed monitoring procedures must be followed. Language (in new subsection [b]) is changed to require "either" provision. It was not the intent for tank owners or operators to implement both procedures.

Specific Purpose

Section 2643(b)(1) - The amendment to this section:

1. Clarifies the product level requirement when automatic tank gauging system is used as the monitoring option and also specifies the performance requirement consistent with the federal language (40 CFR 280.43[d]).

2. Moves the language referring to automatic tank gauges from existing section 2643(i) for better organization.

3. Adds the new requirement for the automatic tank gauges to report the calculated leak rate and leak threshold.

4. Adds language referring to statistical inventory reconciliation to reference the requirements of the new monitoring method covered in section 2646.1.

Factual Basis

1. Existing language does not clearly specify the product level requirement when an automatic tank gauging system is used. It is the intent of the regulations to require product to be delivered to the tank before the test is conducted. In cases where the tank systems are set in the monitoring mode automatically and more frequently, at least one test during the month should be conducted after product delivery, while allowing for sufficient stabilization time to satisfy the requirements of this section.

2. This amendment is made to aid the reader in finding applicable requirements for automatic tank gauges all under one section.

3. This requirement is made to assist local agencies in verifying if the system is using the correct leak threshold. Knowledge of the calculated leak rate can also provide local agencies and tank owner an estimate of the magnitude of the problem when the system reports a failed test.

4. The reference to statistical inventory reconciliation (SIR) is made to specify that when SIR is used to satisfy the

requirements of this section, a tank tightness test will be required every two years.

Specific Purpose

Section 2643(b)(2)(A) - The amendment to this section does not reflect a new requirement. It does the following:

1. Clarifies existing language regarding product level requirements when this method of monitoring is used

2. Adds the language consistent with the federal requirements (40 CFR Section 280.43[c]) to emphasize the important factors which shall be taken into account for the effectiveness of this monitoring method.

Factual Basis

Existing language in this section is not clear and, at times, has not been interpreted correctly. The intent has been to require that the test method be capable of not only testing the entire tank volume, but that the test be conducted when the tank is at its highest operating level.

Specific Purpose and Factual Basis

Section 2643(c) and (c)(1) - Existing language in subsection (d) is moved to (c) and reworded for clarity. Reference to a quantitative release detection method is unnecessary because the title of the section specifies the type of method under discussion. Reference to December 22, 1998 is moved to section 2664(e) where other upgrade requirements are located. Existing language requires a visual or audible alarm. New language requires a visual and audible alarm because this is the requirement throughout the regulations. The word "or" was included in error.

Specific Purpose

Section 2643(d) - Amendments to this subsection include the following: 1) Clarification that suction piping does not have to be tested at 40 psi. The test equipment should be evaluated for the ability to detect a 0.1 gallon-per-hour leak defined at 40 psi. Suction piping should be tested at a pressure designated by the test equipment manufacturer; 2) Provision for an alternative test method for suction piping that cannot be isolated from the tank; and, 3) Requirement for written records of daily monitoring.

Factual Basis

The existing language has been interpreted by the regulated community to require suction lines to be pressurized to 40 psi for a tightness test. This is not the intent of the regulations and an amendment is necessary to clarify the testing requirement for suction lines.

1) The test method used for pipeline tightness tests should be certified to be capable of detecting an 0.1 gallon per hour leak defined at a minimum of 40 psi. If a test method is certified for this capability, the actual line testing can be conducted at less than 40 psi pressure, provided the appropriate leak threshold is used. The leak threshold will be decreased as the test pressure is decreased. Therefore, the new language is necessary to clarify that suction piping does not have to be tested at 40 psi. (In many cases, the valves or other parts of the suction system are not designed to tolerate pressure that high without damage.) The test equipment manufacturer should specify the test pressure for suction lines and use a leak threshold which is calculated based on the test pressure.

2) The amendment also allows the use of an overfilled volumetric tightness test as an option when the pipeline does not have a valve to enable the tester to isolate it from the tank. If this option is not provided, the system must be retrofitted with a valve, which may be costly.

3) It is crucial that inspectors ensure that tank owners or operators conduct daily monitoring of pipelines in accordance with the provisions of Appendix II. This amendment requires that records of that monitoring be kept according to section 2712(b).

Specific Purpose

Section 2643(e) - This new subsection states the requirements for testing gravity flow pipelines and allows these pipelines to be tested less frequently than other pipelines.

Factual Basis

Existing regulations do not specifically refer to gravity flow piping; therefore, this type of piping is currently monitored using the same methods as for pressurized piping. Because gravity flow piping is not under high pressure, the monitoring can be less frequent than for pressurized piping. Also, in most cases, gravity flow piping cannot be isolated from the tank for testing purposes. Therefore, as an alternative, overfilled volumetric tests may be used to test these lines.

Specific Purpose

Sections 2643(f) - "Inventory reconciliation" is changed to "manual inventory reconciliation." Language is clarified to specify who obtains certification.

Factual Basis

Proposed language in these regulations includes a new definition of "manual inventory reconciliation" in order to distinguish it from "statistical inventory reconciliation." Reference to inventory reconciliation in these two subsections is appropriate only for manual inventory reconciliation. Existing language requires a certification to be provided, but it does not state to whom it should be provided.

Specific Purpose

Section 2643(g) - Existing language requires a 48-hour notification to the local agency before a tank test is conducted. It also requires that a report of the results be given to the local agency. Amending this subsection requires the same notification and reporting for pipeline tests.

Factual Basis

Frequently, pipelines are tested separately from the tank. The same notification and reporting to the local agency regarding tanks should apply to pipelines for the proper administration of the local underground storage tank program.

Specific Purpose and Factual Basis

Existing section 2643(i) - The provisions of this subsection are moved to subsection (b).

Section 2644 - Non-visual Monitoring/Qualitative Release Detection Methods

Specific Purpose

Section 2644(e) - This amendment is not a new requirement (see existing section 2641[f]). It clarifies that although nonvisual qualitative release detection is performed on the UST, the requirements of section 2643(d) must be met for existing underground pressurized piping.

Factual Basis

Section 25292(e) H&SC requires all existing underground pressurized piping to be tested using an annual piping tightness test and be equipped with an automatic line leak detector. This

requirement applies to pressurized piping even if a qualitative method is used to monitor the tank.

Section 2645 - Manual Tank Gauging and Testing for Small Tanks

Specific Purpose and Factual Basis

Amending the title of the section makes it more descriptive of the section content. The requirements in this section are limited to tanks with a total capacity of 2,000 gallons or less.

Specific Purpose and Factual Basis

Section 2645(b) - The requirements in this section are pulled from other sections for better organization. New requirements are not being imposed.

Section 2646 - Manual Inventory Reconciliation

Specific Purpose and Factual Basis

There are now two types of inventory reconciliation which may be used to monitor tanks. Existing regulations refer to inventory reconciliation without specifying whether it is manual or statistical because "statistical" is new. The provisions for manual are in this section and "statistical" is in section 2646.1.

Specific Purpose

Section 2646(b) - This amendment removes reference to other leak detection methods using manual stick readings and adds the term, "manual inventory reconciliation". The prohibition against the use of manual inventory reconciliation after December 22, 1998 was moved to this subsection from subsection (c) for better organization.

Factual Basis

This section pertains to manual inventory reconciliation only, and was not intended to impose limitations on other leak detection methods.

Specific Purpose

Section 2646(c)(1) - Language pertaining to "daily" measurements is moved to this subdivision from existing subsection (g) for better organization. Language pertaining to how the measurements should be taken (in new subdivisions [A]-[G]) are moved from existing subsection (h)(1)-(7). The following amendments have also been made:

1. Section 2646(c)(1) - The term "daily," as it relates to the frequency of conducting inventory reconciliation is amended to be no less stringent than federal requirements. Section 280.43(a)(1) CFR requires inventory volume measurements to be recorded every operating day.

2. Section 2646(c)(1)(D) - A fuel finding substance is required to be used on a dipstick. This substance helps hold the liquid mark on the stick, which otherwise has a tendency to evaporate before it can be read. Without the use of fuel finding substance, determining product level is not reliable. The product level can be determined with much greater accuracy if a fuel-finding substance is used.

3. Section 2646(c)(1)(E) - This amendment would require water level measurements in an underground storage tank to be determined by the use of water-finding paste if dipsticking is performed. It is difficult to see water on the end of a dipstick after it is pulled up out of the tank through the fuel. The fuel has a tendency to wash off the water mark if a water-finding paste is not used.

Specific Purpose

Section 2646(c)(2) - The method to be used in measuring the amount of product delivered to a tank is specified. There is also a new requirement to use a drop tube for product delivery.

Factual Basis

The method used to determine the amount of product delivered to a tank must minimize the amount of error in the monthly inventory *reconciliation calculations*.

There are numerous site-specific factors that can influence the degree of error in determining the amount of product delivered to a tank such as the tank tilt, temperature inside the tank, temperature of the product inside the delivery truck, coefficient of expansion of the product, volume of delivery, liquid level inside the tank, volume of the tank, frequency of withdrawals, method of determining the tank liquid level, information on the delivery receipt, reliability of the person performing the level readings, etc. Because there are so many variables, the method for determining the amount of product delivered should be determined on a case-by-case basis. The owner or operator and the local agency should decide which method will introduce the least amount of error and then consistently use the same method each month.

The following paragraph is taken from a guidance letter published by the State Water Board on March 10, 1987, and sent to local agencies:

"Gross and net gallons are neither discussed in the underground storage tank regulations nor the booklets; however, a number of underground storage tank owners have asked which should be used for recording deliveries. A good criterion is to allow the underground storage tank owners to select units that best represent their real situation. For example, net gallons in the volume the product would occupy of it were at 60 degrees F as specified by the American Petroleum Institute (API). In the summer, if the temperature of a delivery is 80 degrees F, the product will occupy a larger volume than at 60 degrees F. However, if this product is delivered to a "low volume" station with a ground temperature in the vicinity of 60 degrees F, then the delivery may have time to contract to the 60 degree F volume. Thus, net gallons would be best suited for this application. On the other hand, if this same product is delivered to a "high volume" station, the volume (and temperature) of the delivered product, when dispensed from the underground storage tank, may be close to the volume (and temperature) of the product when it was loaded into the truck at the terminal. In this instance, the gross delivery closely represents what is being reported as sold by the dispensing meters. The underground storage tank owners should be consistent in whichever method they are using."

The requirement to use a drop tube is added to make state regulations no less stringent than federal regulations (CFR 280.43). The purpose of a drop tube is to reduce vaporization during product delivery and to provide a vertical opening for accurate dipstick measurements.

Specific Purpose and Factual Basis

Existing section 2646(d) - This language is removed because it is redundant. It is clear by reading the provisions of the section that owners and operators must comply with the provisions of the section.

Specific Purpose and Factual Basis

Section 2646(d) - This language is moved from existing subsection (i). The following amendments are also made:

1. Daily variations must be algebraically summed for a period of one month to make it clear that the absolute value of the monthly variations does not exceed a certain amount.

2. The requirement to take physical measurements at the same time every day is replaced with a requirement to take the measurements daily. There is no reason to take the measurements at the same time each day.

Specific Purpose

Section 2646(e)(1)-(6) - This language is moved from existing subsection (k)(1)-(6) and edited for clarity. The following amendments are also made:

1. Specific Purpose - Section 2646(e)(4) (existing section 2646[f]) - This amendment will change the title of the section from, "Chapter 9, Subchapter 1," to "Division 9" to reflect the change in indexing the California Code of Regulations by the Office of Administrative Law. The amendment would also specifies that retail and nonretail facilities are subject to this subsection.

   Factual Basis - The Office of Administrative Law changed the indexing of the California Code of Regulations. Title 4, Division 9, CCR requires an inspection of meters at retail facilities only. However, section 2646(e)(4) subjects all meters used for determining inputs and withdrawals to the inspections of a county Weights and Measures person or a device repairperson.

Specific Purpose and Factual Basis

Existing section 2646(f) - The provisions of this subsection are moved to subsection (e)(4) for better organization.

Specific Purpose and Factual Basis

Section 2646(f) - This language is taken from the last sentence of existing subsection (l).

Specific Purpose and Factual Basis

Existing section 2646(g) - The provisions of this subsection are moved to subsection (c)(1).

Specific Purpose and Factual Basis

Section 2646(g) - The provisions of this subsection are moved from existing subsection (j).

Specific Purpose and Factual Basis

Existing section 2646(h) - The provisions of this subsection are moved to subsection (c)(1)(A)-(G).

Specific Purpose and Factual Basis

Existing sections 2646(i), (j), (k), and (l) are moved to sections 2646(d) and (e).

Specific Purpose and Factual Basis

There are no substantive changes to subsection (h) (existing subsection [m]).

Section 2646.1. Statistical Inventory Reconciliation

This new section covers a method of quantitative release detection recently developed by industry, called "statistical inventory reconciliation".

From time to time, new testing equipment and/or methods are developed, reviewed, and placed on the State Water Board's list of testing methods which meet EPA standards and which may, therefore, be used in California. Several vendors have submitted third-party evaluation reports for statistical inventory reconciliation (SIR). The reports were reviewed and the methods have been determined to meet performance standards for monthly leak detection.

EPA has recognized the new test method by developing a standard test procedure for evaluating SIR methods. Each vendor must have the equipment and procedures evaluated according to EPA criteria before offering it for use in California.

SIR uses sophisticated statistical software to conduct computerized analyses of inventory data collected manually or by automatic tank gauges. The difference between statistical and manual inventory reconciliation is the method of analysis. SIR adopts a systematic statistical and engineering analysis and manual inventory reconciliation is done using a bookkeeping accounting system to determine if the tank is leaking.

The use of SIR is not a new requirement, but an additional leak detection method available to tank owners and operators.

Article 5. Release Reporting and Initial Abatement Requirements

Section 2650 - Reporting and Recording Applicability

Specific Purpose

Section 2650(e) - This amendment replaces reference to the State Water Board with a reference to the local agency. Reference to section 25295.5 is added.

Factual Basis

Section 25295(a) H&SC requires an unauthorized release to be reported to the *local agency, not the* State Water Board. Section 25295.5 H&SC was implemented after these regulations were amended in August 1991. This new statute also describes unauthorized releases.

Section 2652 - Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

Specific Purpose

Section 2652(b) - This amendment would enable local agencies to require tank owners/operators to remove any remaining stored substance from tanks in the event of an unauthorized release.

Factual Basis

The local agency, on a site-specific basis, may determine that removing a hazardous substance from a tank is necessary to stop further pollution or to facilitate corrective action.

Specific Purpose

Sections 2652(d) - This amendment replaces "regional board" with "Regional Water Quality Board". "Agency" is used in the language to include "local agency" and "Regional Water Quality Board" so that these terms do not have to be repeated frequently.

Factual Basis

On July 26, 1992, an executive policy decision was made by the State Water Board to use the term, "Regional Water Board."

Specific Purpose

Sections 2652 (e) and (g) - These sections are amended by deleting the term, "local" from local agency, thus including Regional Water Quality Boards as oversight agencies.

Factual Basis

Regional Water Quality Boards have oversight responsibilities for cleanup activities in some cases. In existing language, subsection (d) refers to Regional Boards as having this responsibility. The amendment deletes the term "local" in subsections (e) and (g) for clarity and consistency with subsection (d).

Specific Purpose

Section 2652(f) - This amendment would add reference to the corrective action requirements of Article 11.

Factual Basis

Chapter 6.75 was added to the H&SC in 1989. Section 25299.37 established the requirement for an owner, operator, or other responsible party to take corrective action in response to an unauthorized release.

Section 2655 - Free Product Removal

Specific Purpose

Section 2655(a) - This amendment would replace the statement, "as determined by the local agency" with a reference Section 2722(b) in Article 11.

Factual Basis

The proposed amendment ensures consistency with section 2722(b) of Article 11, which requires a responsible party to notify the implementing agency before beginning free product removal.

Article 6. Repair and Upgrade Requirements

Section 2660 - Applicability

Specific Purpose and Factual Basis

Section 2660(b) - Reference to tank lining is added so that all subjects covered in section 2661 are listed in this introductory section.

Specific Purpose and Factual Basis

Section 2660(c) - This subsection describes the applicability of the requirements in section 2662. Topics covered in section 2662 have been identified here by subsection for clarity.

Specific Purpose and Factual Basis

Section 2660(e) and (f) - The word, "pressurized" is removed in these subsections because the requirements in section 2664 are not limited to pressurized piping.

Specific Purpose

Section 2660(g) - New language prohibits lining a tank more than once if there has been an unauthorized release. Section 2661 is referenced because new language in that section includes tank lining requirements.

Factual Basis

Section 25296(a) H&SC states that a tank may be lined only once if there has been an unauthorized release. This new language is added to implement that law.

Section 2661 - Underground Storage Tank and Piping Repairs and Tank Lining

Specific Purpose and Factual Basis

The title of the section is changed to include tank lining because there are new provisions in the section for tank lining.

Specific Purpose

Section 2661(a) - This amendment clarifies that the provisions of subsections (b) through (d) must be considered prior to lining a tank. Subsection (b) must be complied with before repairing a tank without lining. Subsection (c) does not apply if a repair is performed without lining.

Factual Basis

Subsections (c) and (d) only apply to tank lining. They are not applicable to tank repairs made without lining.

Specific Purpose

Section 2661(b) - This amendment clarifies that this section applies only to repairs to tanks and piping. A requirement is added to take soil samples before repairing a tank in order to determine whether an unauthorized release has occurred.

Factual Basis

Taking soil samples before lining a tank is discussed in section 2660(g). Tank lining is just one method to repair a tank. The requirement to take soil samples should be applicable before any method of tank repair is performed.

Specific Purpose

Section 2661(c) - The purpose of amendments to this subsection is to specify those circumstances which require an evaluation by the special inspector. The amendments also specify that written certification of the evaluations shall be provided to the local agency. In addition, this subsection is reorganized so that it clearly outlines the evaluations and tests that must be performed by the special inspector as well as the steps that must be performed in the event that a tank fails one of the evaluations or tests.

Factual Basis

The evaluations performed by the special inspector must be completed and written certification provided to the local agency prior to all tank lining. In addition, it is necessary to perform the vacuum test after the tank has been lined to ensure the structural integrity of the tank. Consequently, the vacuum test requirement is moved from section 2661(c)to section 2661(k).

Specific Purpose and Factual Basis

Section 2661(d) - This amendment clarifies that subsection (c) only applies to repairs made by lining a tank and not to other types of repairs.

Factual Basis

Subsection (c) was originally written for tank lining repairs and was not intended to apply to other types of repairs such as patching.

Specific Purpose and Factual Basis

Sections 2661(e),(f), and (g) - These subsections are reworded for clarity. There are no substantive changes.

Specific Purpose and Factual Basis

Section 2661(h) - Existing language in this subsection states that the provisions of the subsection become effective one year after the effective date of the regulations. Now that the exact effective date is known, it should be stated for clarity.

Specific Purpose

Section 2661(i) - Amendments to this subsection specify how repairs must be made for steel and for fiberglass tanks. Water-tight hydraulic cement is specified as a way to plug holes in steel tanks.

Factual Basis

Materials used to construct fiberglass tanks is different from materials in steel tanks; therefore, materials used in repairs will differ in some cases. Under some circumstances and under proper application, the use of water-tight hydraulic cement is an effective means of plugging holes in steel tanks. American Petroleum Institute's Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," allows the use of hydraulic cement to plug holes in steel tanks.

Specific Purpose

Sections 2661(j) - These amendments would clarify that this subsection applies to tanks that have been lined to satisfy the December 22, 1998 upgrade requirement as well as to repaired tanks, with or without lining.

Factual Basis

In the course of lining a tank, external corrosion may be apparent. If corrosion is detected, cathodic protection must be added to the tank to prevent further corrosion.

Specific Purpose

Section 2661(k) - The purpose of amendments to this subsection is to clarify those circumstances which require that lined tanks be internally inspected after lining. It also clarifies who should provide the local agency with certification of the inspection. Finally, the vacuum test requirement is added to this subsection.

Factual Basis

The internal inspection must be performed and certification provided to the local agency by the owner, operator, or party performing the inspection within 30 calendar days of completion of any lining application. Specifying 30 calendar days is consistent with other subsections of the regulations which require a 30-day deadline for submittal to the local agency. The vacuum test requirement is removed from 2661(c) and included in 2661(k) to clarify that it should be performed following the application of the lining.

Specific Purpose

Section 2661(l) - This amendment removes the reference to non-steel tanks and adds a reference to additional requirements specified by the tank manufacturer.

Factual Basis

There may be repair requirements specified by manufacturers of steel or clad tanks that are not included in regulation. If so, they must be complied with to ensure that the repair is done.

Specific Purpose

Section 2661(n) - This amendment removes the tightness testing requirement for repaired piping, requires the tightness testing requirement for tanks lined for the purpose of upgrade or preventive maintenance, and removes the requirement specifying that the tightness testing should be performed in accordance with the tank manufacturer's specifications.

Factual Basis

This subsection was not intended to apply to piping repairs. Subsection 2662(m) applies to piping repairs. Requiring tightness testing for tanks lined for the purpose of upgrade or preventive maintenance will help ensure that the lined tank is tight. Before allowing the tank to go back into service, its integrity must be verified. Tank manufacturers do not specify tightness testing criteria. A tightness test that has been third-party evaluated and listed by the State Water Board must be performed.

Specific Purpose

Section 2661(o) - This amendment adds the requirement that records be maintained on tank lining work. Such records are currently required for tank repair work.

Factual Basis

Owners and operators must maintain records of lining that demonstrate compliance with the requirements for lining. These records will enable the local agency to determine whether the lining is in compliance.

Specific Purpose

Section 2661(q) - This new subsection would require fiberglass and clad tanks repaired with interior lining to receive the same inspection as tanks upgraded with interior lining as specified in 2662(b)(3). It would also require written certification of the inspection to be provided by the owner to the local agency within 30 calendar days of completion of the inspection.

Factual Basis

Existing section 2662(b)(3) requires tanks which are upgraded with interior lining to have a coatings expert, or special inspector, inspect the tank interior every five years. Tanks repaired with lining should have the same requirement. Proper local agency oversight requires written notification regarding the results of the inspection. Thirty calendar days is adequate time for owners to report to local agencies.

Section 2662 - Underground Storage Tank Upgrade Requirements

Specific Purpose

Section 2662(b)(1) - This amendment exempts tanks which are upgraded with interior lining from the provisions of subsection (b) of section 2661.

Factual Basis

Subsection 2661(b) is being amended such that it no longer applies to tanks which are upgraded with interior lining; it applies only to repaired tanks and piping. Consequently, tanks which are upgraded with interior lining must be exempted from section 2661(b).

Specific Purpose

Section 2662(b)(3)(C) - This amendment removes the visual inspection requirement for this subsection. It also specifies the purpose of measuring the interior diameter of the tank. "Inspector" in existing language means a coatings expert. Special inspector is added to give more options to the tank owner.

Factual Basis

The visual inspection requirement is relocated to section 2662(b)(3)(D). Regarding the requirement to measure the interior tank diameter, tanks can compress over time due to various stress factors such as the weight of the soil. If the tank compresses by more than 1.0%, then its integrity will be significantly decreased. These diameter measurements help in the assessment of the tank's integrity. Measuring the interior diameter is not a new requirement. The amendment sets a standard to compare the measurements.

Specific Purpose and Factual Basis

Sections 2662(b)(3)(D) and (E) - This amendment clarifies the evaluations and tests that must be performed on tanks that have

been lined. It also states what should be done if a tank fails one of the tests or evaluations.

Specific Purpose

Section 2662(b)(3)(F) - This amendment specifies under what conditions a tank may be relined.

Factual Basis

Section 25296(d) H&SC specifies when a tank may not be relined, but is not clear about when a tank may be lined. Some owners who have lined their tank may wish to reline it again in the future to further extend its operations life. However, if a tank fails any of the tests in section 2662(b)(3)(A)-(E), does not comply with section 2660(g), or soil sampling determines that there has been a leak, the tank may not be relined.

Specific Purpose and Factual Basis

Section 2662(b)(3)(G) - Language is added to clarify the existing requirement that tanks must be closed if they fail any of the required interior inspections or evaluations. This provision was moved from existing section 2662(b)(3)(D) and (E).

Specific Purpose

Section 2662(c) - This amendment would require all tanks to be retrofitted with a striker plate by December 22, 1998.

Factual Basis

Repeated dipsticking of a tank will cause the tank interior to wear in the area where the dipstick contacts the tank. Virtually all tanks will be "sticked" for the entire operational life of the tank either as part of the leak detection monitoring program or for inventory purposes. Retrofitting all tanks with a striker plate will prevent damage to the tank as a result of dipsticking.

Specific Purpose

Section 2662(d) - This amendment provides an additional method by which an existing tank without secondary containment can be upgraded to satisfy the requirements in section 2662. Retrofitting an existing tank with a bladder system must meet applicable requirements of Article 3.

Factual Basis

An existing single-walled tank retrofitted with a bladder system according to the criteria in section 2662(d) provides both primary and secondary levels of containment as well as

interstitial monitoring. Since the bladder system becomes the primary container for the tank, bladder system materials and the installation process must be certified by an independent testing laboratory. This requirement is consistent with section 2631(b) which requires independent testing laboratory certification for the primary containment of new installations. The requirement that bladder systems must be installed under the direct supervision of a representative of the bladder system fabricator or a contractor certified by the fabricator is consistent with section 2635(d) which provides certification standards for the installation of new tanks and with section 2631(d)(7) which provides certification standards for the installation of membrane liners. Consequently, the criteria proposed for subsection 2662(d) is intended to be consistent with installation, construction, and monitoring requirements in Article 3 for new tanks.

Subsection (d)(2) of this amendment requires interstitial monitoring according to section 2632(c)(2) which is consistent with section 2662(a) which requires all tanks upgraded with secondary containment to be monitored according to Article 3.

The requirement in subsection (d)(3) that the bladder system be compatible with the substance stored is consistent with the same requirement for existing tanks that are upgraded interior lining [2661(g)]. The requirement for chemical compatibility will help ensure that the tank will not leak in the future.

The requirement in subdivision (d)(4) that existing steel tanks retrofitted with a bladder system must be interior lined is consistent with section 2631(d) which states that the secondary containment for new installations must be corrosion resistant to prevent structural weakening or damage to the secondary containment as a result of contact with any released hazardous substance. Requiring lining of the tank will help ensure that there will not be a breach of the secondary wall. Since the interior lining will be covered by the bladder, future maintenance inspection of the lining specified in section 2662(b)(3) will not be required until the bladder system needs repair.

The requirement in subsection (d)(5) that the bladder system include a striker plate is consistent with section 2631(c) and section 2662(c) which require new tank installations and all other upgraded tanks to include a striker plate, respectively. Retrofitting the bladder system with a striker plate will prevent damage to the primary containment as a result of dipsticking.

The requirement in subsection (d)(6) that existing tanks retrofitted with a bladder system must comply with subsections 2635(a)(4), (5), and (6) is consistent with requirements for all installations of new tanks. These subsections specify post-

installation testing and certification that the installation was performed up to standards. This requirement will make bladder system installations consistent with new tank installations as *discussed in Article 3.*

Section 2663 - Spill and Overfill Prevention Equipment Upgrade Requirements

Specific Purpose

Section 2663(a) - This amendment specifies that the local agency may waive the upgrade requirement of retrofitting with overfill prevention equipment under specified conditions.

Factual Basis

The regulations do not currently require upgrading with overfill prevention equipment if certain specified conditions are met, but they do not specify who may decide whether the specified conditions have been met. It is understood that the local agency makes this decision, but to make this point clear, the text is amended to specify that the local agency makes the determination.

Section 2664 - Underground Piping Upgrade Requirements

Specific Purpose

Sections 2664(a) and (b) are amended to delete the word, "pressurized" from the text. This amendment also clarifies that secondary containment must comply with the requirements of section 2636.

Factual Basis

Section 280.21(c) of the federal regulations does not limit the upgrade requirements to pressurized piping. This change makes state regulations consistent with federal requirements.

Specific Purpose

Section 2664(c) - The requirement to shut off the pump in existing section 2643(c)(1) is being moved for better organization. The requirement to have an automatic line leak detector is deleted from this section because it is included in section 2643(c).

Factual Basis

This requirement is an upgrade requirement for pressurized piping without secondary containment. Thus, it should be located in section 2664 rather than 2643(c)(1). Section 2636(e)(3) states that underground pressurized piping with secondary containment

does not need to have an automatic line leak detector if the interstitial sump monitor can shut off the pump when a release occurs or if there is a mechanical line leak detector and an annual piping tightness test. The automatic line leak detector is not required to shut off the pump and activate an alarm system if the line leak detector is mechanical, the underground pressurized piping is secondarily contained, and an annual piping tightness test is performed. If these conditions are met, unauthorized releases will be detected before reaching the environment at least as efficiently as single-walled piping with an electronic line leak detector capable of shutting off the pump.

Specific Purpose

Section 2664(d) - This subsection is amended to delete the words, "pressurized," and "annually" from the text.

Factual Basis

All underground piping needs to be tested for tightness after installation, not just pressurized piping. Annual testing requirements are set forth in section 2643 for underground storage tanks and piping.

Article 7. Closure Requirements

Specific Purpose and Factual Basis

"Operator" has been added to sections 2670 and 2672 in keeping with the statutory reference to "person" as having responsibility for tank closure. In most instances, the person closing the tank is the owner or operator. The language in Article 11 which requires a responsible party to take corrective action would cover those cases where a person other than the owner or operator would be responsible for corrective action steps that are also discussed in Article 5 and 7.

Section 2670 - Applicability

Specific Purpose

Section 2670(b) - The amendment to this subsection requires owners or operators to complete a site assessment before the temporary closure period can be extended by the local agency. This amendment also deletes the requirement to upgrade the tank if the owner or operator intends to extend the temporary closure period.

Factual Basis

Federal regulations (40 CFR 280.70) require owners and operators to conduct a site assessment when a request for extension of temporary closure is made. This ensures that the extension is not used to postpone necessary corrective action activities. The requirement to upgrade is deleted because it is not necessary to upgrade a tank if the owner or operator plans to continue the temporary closure.

Specific Purpose

Section 2670(e) - This amendment requires owners or operators of tanks which are subject to temporary or permanent closure to make application for closure within 90 days of ceasing to operate the tank. To prevent the owner from delaying the start and completion of the actual work, the local agency should specify a reasonable period of time to complete the work.

Factual Basis

Existing regulations require that tanks which are not intended for reuse be temporarily or permanently closed (section 2670[b] or [c]). Existing regulations do not specify how soon the decision must be made whether to close. Without a time limitation for making an application to close, some owners continue monitoring the tank instead of closing it. An inactive tank is a potential hazard and should be closed properly. This amendment will prohibit prolonged monitoring periods for those tanks.

Specific Purpose

Section 2670(j) - This amendment specifies that closure requirements apply if the use of a tank changes from regulated to exempt.

Factual Basis

Unless certain closure procedures are followed when a regulated tank becomes exempt, there would be no way to ensure that an unauthorized release did not occur during the period of regulation.

Section 2671 - Temporary Closure Requirements

Specific Purpose

Section 2671(d) - This amendment clarifies existing language in this subsection.

Factual Basis

The requirement in this subsection is very important and may greatly influence a tank owner or operator's decision to place tanks in temporary closure. However, existing language is not clear and the regulated community and some local agencies have been unaware of the requirement. The new language clearly states that at the end of temporary closure, a tank owner or operator has three options: 1) permanently close the tank if it is not going to be used; 2) upgrade the tank before the tank is used again; or 3) request an extension of temporary closure and conduct a site assessment before the extension is granted.

Section 2672 - Permanent Closure Requirements

Specific Purpose

Section 2672(d)(2) - This amendment requires alternate methods used for conducting a soil boring in the backfill to be approved by the local agency. The amendment also deletes the requirement for downgradient ground water monitoring for tanks closed in place where the distance to ground water is less than 20 feet.

Factual Basis

The owner of an underground storage tank being closed pursuant to section 2672 must demonstrate to the satisfaction of the local agency that no unauthorized release has occurred. The method of taking a soil boring must be reviewed by the local agency, especially if an unconventional method is used. This amendment makes this section of the regulations consistent with the corrective action requirements of Article 11. The deleted requirement would have required a ground water investigation at all sites when tanks are closed in place and distance to ground water is less than 20 feet. The corrective action regulations call for a phased approach to site investigation. Soil samples and other evidence of contamination are prerequisites for a ground water investigation.

Specific Purpose

Section 2672(e) - This amendment clarifies that only a reportable unauthorized release requires follow up under Article 5 and adds reference to the corrective action requirements of Article 11.

Factual Basis

The reference to a reportable unauthorized release makes this section consistent with Article 5. The reference to the corrective action requirements of Article 11 implements chapter 6.75, section 25299.37, which requires an owner, operator or

other responsible party to take corrective action in response to an unauthorized release.

Article 8. Site-Specific Variance Procedures

Section 2680 - General Applicability of Article

Specific Purpose

Sections 2680(a) and (b) - Reference to categorical variances is deleted in subsection (a) and (b).

Factual Basis

Assembly Bill 1731 (Sher), statutes of 1991, amends sections 25299.2 and 25299.4 H&SC to delete the provision allowing categorical variances from construction and monitoring requirements. The legislature determined that his provision had never been used and therefore was not needed.

Existing Section 2681 - Categorical Variances

Specific Purpose and Factual Basis

The entire section regarding categorical variances is deleted for the reasons stated in the Factual Basis for section 2680 above. Existing section 2682 will be renumbered to 2681.

New Section 2681 - Site-Specific Variances

Specific Purpose

Section 2681(b)(7) - This amendment would allow local agencies to set fees (up to maximum amounts set by existing regulations) for variance requests.

Factual Basis

Existing language requires local agencies to charge exact fees of $2,750 for a variance application at one site and $5,500 for a variance application for more than one site. In some cases, local agencies may be able to process variance request applications for less that the amount prescribed by this regulation.

Article 9. Local Agency Requests for Additional Design and Construction Standards

Amendments made in Article 9 are editorial only.

Article 10. Permit Application, Quarterly Report, and Trade Secret Requirements

Section 2713 - Transmittal of Unauthorized Release Reports

Specific Purpose

Section 2713(b) - This amendment requires local agencies to transmit unauthorized release update information to the appropriate Regional Water Board on a quarterly basis.

Factual Basis

This is not a new requirement. It clarifies the intent of 2713(b). Because the Leaking Underground Storage Tank Information System (LUSTIS) report is updated quarterly, local agencies should update Regional Water Boards on a quarterly basis. Updated information from local agencies can be readily included in quarterly updates of LUSTIS reports, if necessary.

Specific Purpose

Section 2713(c) - This subsection is added to establish authority to require each local agency to transmit an Underground Storage Tank Program Implementation Report to the State Water Board on a quarterly schedule.

Factual Basis

Section 25299.7 of the H&SC states that the State Water Board may prepare any procedures and implementation plans necessary to assure compliance with requirements for a state program implementing the federal act. These procedures and implementation plan may include plans with respect to investigation, compliance monitoring, enforcement, public participation and sharing of information among local agencies, the State Water Board and EPA. The Quarterly Underground Storage Tank Implementation Program Report is part of the State Program Approval.

Allen

SOR for Article 6

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products and procedures.

2660

(a) This subsection is modified to clarify that any manufacturer's specifications which exceed the requirements in this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) This section is modified to clarify that repairs are made only following a release of product. (Also see the definition of "repair.") Many activities which are considered repairs may in fact be preventative maintenance or "upgrades". Health and Safety Code § 25296 places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) This subsection is added to reference the new section which contains requirements for interior lining.

(e) This subsection is added to reference the new section which contains requirements for bladder installation.

(f), (g) & (h) These subsections are moved from subsections (d), (e), & (f) respectively. No substantive change.

(i) This subsection is moved from (g). No substantive change.

(j) A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) A requirement is added that local agencies cannot approve repairs or upgrades when the tank is not sound and the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of 40 CFR 281.32(d).

(l) This subsection is moved from subsection 2661(f).

(m) This subsection is moved from subsection 2661(g)

(n) This subsection is moved from subsection 2661(j).

2661

(a) This section is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make the repair and place the tank back into operation without following up on cleaning up the release. Such action could be intentional or unintentional.

(b) The first sentence in this subsection adds a procedure to carry out the requirement in 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) This subsection is moved from subsection 2660(g) and reworded. There is no substantive change.

(d) This subsection is moved from subsection 2661(i). There is no substantive change.

(e) This subsection is moved from subsection 2661(m) and reworded. In addition, language is added to comply with requirements in 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5.

(f) This subsection is moved from subsection 2661(n) and reworded. There is no substantive change.

(g) This subsection is moved from subsection 2661(p). There is no substantive change.

2662

(a) This subsection adds a procedure to carry out the requirement in 40 CFR 281.32(d).

(b) This subsection is moved from subsection 2662(a)

(c) (1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) This subsection is moved from subsection 2662(c). There is no substantive change.

(e) This subsection is moved from subsection 2662(b)(4). A requirement is added that all upgraded tanks must be closed at the end of their operational life.

2663

A new Section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

(a) This subsection is moved from subsection 2661(a) and reworded. No substantive changes are made.

(b) This subsection is moved from subsection 2661(c). No substantive change is made.

(c) This subsection is moved from subsection 2661(d). No substantive change is made.

(d) This subsection is added due to reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) This subsection is moved from subsection 2661(h). No substantive change is made.

(f) This subsection is taken from subsection 2661(k) and reworded to reflect reorganization. No substantive change is made.

(g) This subsection is moved from subsection 2661(n). No substantive change is made.

(h) This subsection is moved from subsections 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

2664

For clarification, the bladder option of upgrading a tank has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(c) The requirement has been added to provide cathodic protection for steel tanks. This requirement was added to comply with the federal upgrade requirements found in 40 CFR 280.21. Without requiring cathodic protection, bladders would have to be removed to allow internal inspection at five or ten year intervals. Pre-lining structural limiting criteria have been

eliminated when the interior lining is capable of providing structural support.

(d) This subsection is added to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement.

2665

This section is moved from subsection 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements. See 2635(b)(3).

2666

This section is moved from section 2664. The only substantive change is that a requirement is added that not later than December 22, 1998, automatic line leak detectors are required to shut down the pump automatically if the leak detector fails or is disconnected.

SEP 16 1993

9/28

UNDERGROUND STORAGE TANK REGULATIONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). This chapter establishes requirements for the design, construction, installation, monitoring, testing, repair and upgrade, permitting and closure of USTs as well as release reporting, investigation, and initial abatement after unauthorized releases from USTs. The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

UST regulations originally became effective in August 1985. Amendments were made and the existing version of the regulations was adopted on August 9, 1991. On April 2, 1993, the State Water Board proposed numerous amendments to existing regulations and began a 45-day comment period which ended on May 17, 1993. A public hearing was held on June 14, 1993, at which oral and written comments were received. A summary of those comments and the State Water Board's responses are included in the Final Statement of Reasons.

Although many modifications have been made, they are substantially related to the original proposals and a reasonable member of the directly affected public could expect that these types of changes could be made.

The proposed changes do not mandate prescriptive standards referenced in section 11346.14 of the Government Code. The specific purpose of each proposed change is explained as well as the necessity for the change. Grammatical and editorial changes are not itemized here, but are identified by underline and strikeout in the modified text.

This Final Statement of Reasons includes only those amendments made to the originally proposed text noticed on April 2, 1993.

ARTICLE 1. DEFINITION OF TERMS

Section 2611. Additional Definitions

"Bladder system" is modified to include rigid material because bladder systems can be constructed of both types of material.

"Compatible" is added using language in federal regulations. The term is used in the definition of membrane liner and without a definition the meaning may not be clear.

"Connected piping" is added using language in federal regulations. The term is used in the definition of "substantially beneath the surface of the ground" and without a definition, the meaning may not be clear.

"Excavation zone" is added using language in federal regulations. The term is used in section 2641 and without a definition, the meaning may not be clear.

"Existing underground storage tank" - This definition is modified to clarify which tanks are considered "existing tanks" and therefore subject to the requirements in Article 4 and all other applicable requirements. All USTs installed before 1/1/84 are considered existing tanks, and with only one exception, all tanks installed on or after that date are <u>not</u> existing tanks (i.e.,

they are "new" tanks, see below.) The exception is for motor vehicle fuel tanks over 1,100 gallons located at a farm and used for agricultural purposes. These tanks were not regulated until 1/1/87. So, such tanks installed between 1/1/84 and 1/1/87 are also considered existing tanks. The previously proposed language was vague as to this exception.

"Farm tank" is modified for clarity. Existing language can be interpreted two ways. It could be describing a combination of tanks which, together, hold no more than 1,100 gallons or it could be describing a combination of tanks which, individually, hold no more than 1,100 gallons. For some owners of farm tanks, the distinction is significant and means the difference between having regulated or unregulated tanks.

"Free product" is added using language in federal regulations. The term is used in Article 6, and without a definition, the meaning may not be clear.

"Hydraulic lift tank" was deleted from the regulations in the original proposals because the State Water Board intended to remove these tanks from the list of exempted tanks in section 2621. Because the decision has been made to include hydraulic lift tanks in the list of exemptions, the definition is reworded to agree with the federal definition and is reinstated.

"Inconclusive" is added because that term is used in the text to define results of statistical inventory reconciliation.

"Leak threshold" is amended to clarify the fact that it is not an allowable leak rate. Leak threshold is a number used to determine the leak detection ability of the test method. All leaking tanks need to be fixed regardless of the rate of the leak.

"Maintenance" is added using language in federal regulations. The term is used throughout the text of the regulations and without a definition as it applies to underground storage tanks, the meaning may not be clear.

"Manual inventory reconciliation" is modified to reflect the fact that it is used for determining if a leak has occurred and not only for investigating product loss.

"New underground storage tank" is modified to make clear that the terms "new" and "existing underground storage tank" are mutually exclusive and all encompassing of the regulated universe of tanks. This modification is made in response to concerns expressed by US EPA that the previous language could be construed as to leave a void between the two definitions and consequently allow some tanks which should be subject to new requirements to comply with only the existing tank requirements.

"Operational life" is added using language in federal regulations. The term is used in Article 6 to refer to a tank's useable life. Without a definition, the meaning may not be clear.

"Person" is modified to make clear that all entities regulated under federal law are also regulated under California law. This change is made in response to US EPA concerns expressed during review of the California UST program pursuant to Federal Rule 40 CFR 281 that the statutory definition does not clearly name the same set of regulated entities..

"Release detection method" is modified at the request of EPA to include "release detection system" because that term is used in the text of the regulations.

"Repair" is added because the term is used extensively in the regulations. Provisions of Article 6 differentiate between repairs and upgrades and without a definition, the requirements for each may be misunderstood.

"Statistical inventory reconciliation" is amended for clarity.

"Statistical inventory reconciliation provider" is added because the term is used in the proposed text which may not be clear without a definition.

"Storm water or wastewater collection system" is added using language in federal regulations. These terms are used in Article 6 and without a definition, their meaning may not be clear.

"Upgrade" is added because existing regulations require tank owners to upgrade their tanks by December 22, 1998, and this term is used in the text in Article 6. Without a definition, the meaning may be unclear.

ARTICLE 2. GENERAL PROVISIONS

Section 2620. General Intent, Content, Applicability, and Implementation of Regulations

In addition to editorial changes in subsections (b) and (d), the following modification is made to this section:

(d) - This subsection provides an overview of applicability of each article. The reference to Article 11 is added to bring this section up to date. Article 11 was added during the 1991 revision, but section 2620(d) was not updated at that time.

Section 2621. Exemptions from the Regulations

In addition to a change for clarity in (13) and renumbering (15) and (16), the following modifications are made:

(a) - This modification clarifies that the listed tanks are not exempt from California rules if subject to federal regulation.

(a)(3) The exemption for tanks in vaults or basements has been moved to (a)(15) so that the hydraulic lift tank exemption could be returned to this subdivision where it was located before the proposed amendments were made. The exemption for hydraulic lift tanks is modified to include all such tanks and not only those with a capacity of under 110 gallons as specified in existing regulations.

Several commenters addressed the proposed amendment to section 2621(a)(3) which would have resulted in the regulation of all hydraulic lift tanks in California. The State Water Board has made the decision to modify this section to exempt all hydraulic lift tanks from regulation.

The decision to exempt hydraulic lift tanks is based on the following:

- They are not used for storage as that term is used in the definition of "underground storage tank" and therefore, do not fit the definition.

- The threat to human health and the environment is minimal because the tanks contain small amounts of regulated substances. The risk of contamination is relatively low in comparison to underground storage tanks which store large quantities of hazardous substances.

- They are self-monitoring. When a leak occurs, the machinery they support ceases to operate.

- The cost impact in regulating these tanks would be severe for both the owners and the implementing agencies. Owners would need to retrofit existing tanks which may be located underground under large buildings. The tanks would need to be monitored using some method other that those used for underground storage tanks because current monitoring methods are not practical for hydraulic lift tanks. The potentially overwhelmingly large number of tanks would require considerable effort on the part of implementing agencies, with little discernable environmental benefit. Regulation of these tanks would divert agency resources from other, more serious health threats.

(a)(15) - The exemption for tanks located in vaults or basements is moved from subdivision (3).

(a)(16) - The exemption for structures exempted by section 25281(x) H&SC is moved from subdivision (15).

ARTICLE 3. NEW UNDERGROUND STORAGE TANK DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS

Section 2630. General Applicability of Article

(a) - The purpose of this paragraph is to accommodate cases where tanks were installed after the effective date of the overall UST regulatory program (1/1/84) but before later more stringent requirements were added by statutory revision. The new language eliminates the unnecessary reference to the effective date of the regulations.

Section 2631. Design and Construction Requirements for New Underground Storage Tanks

(c) - Language is added to this section to clarify that striker plates attached to the bottom of drop tubes satisfies the requirement to have a striker plate. Normally, they are affixed to the bottom of the tank. At least one manufacturer has developed a striker plate which can be attached to the drop tube and provides the same protection as striker plates which meet the specifications of section 2631(c). Allowing the use of this new technology is environmentally safe and provides tank owners with an option which is less expensive than emptying and retrofitting a tank with a striker plate.

(d)(9) - This paragraph is added to meet the requirements of the federal program, as specified in Federal Rule 40 CFR 280.43, pertaining to UST systems using excavation barriers as a means of providing secondary containment. A requirement is added to ensure that secondary containment is above the ground water and not in a 25-year flood plain unless the containment and monitoring designs are for use under these conditions. The purpose is to prevent the secondary containment from being flooded.

(h) - The language added in the April proposed amendments is removed because the change is not necessary to be no less stringent than EPA requirements as originally thought.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(c)(1)(D) - This subdivision is amended to require analysis of liquid around a tank only if necessary to determine if there has been an unauthorized release and only if the method of analysis is approved by the local agency. There are occasions when it is unnecessary to go to the expense of analyzing liquid in order to know if there has been an unauthorized release (e.g., visible leaks). Requiring approval of the local agency to use a specific method of field analysis will allow the local agency to authorize the use of methods that will work for site-specific cases.

(c)(2)(A) - This amendment specifies that continuous monitoring systems must meet the specifications of section 2643(f). Without this specificity, this language may be incorrectly interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

(d)(1)(B) and (C) - Requirements are added to include the name and model number of monitoring equipment and a plot plan in monitoring program written procedures. This specificity is necessary in order for local agencies to identify monitoring equipment used by owners and operators and to identify exact locations where monitoring is conducted.

(d)(2) - Language is added to allow the LIA to approve a longer period of time to prepare a response plan. Some tank owners may have valid reasons for needing more than 30 days to prepare such plans.

(e) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2633. Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

(d) - The requirement that the owner or operator demonstrate that the leak interception and detection system is capable of detecting a release before it escapes into the environment pertains to monitoring requirements for the system, as opposed to design and construction requirements, and is, accordingly, moved to Section 2634(d).

Section 2634. Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

(d) - Language in this subsection is moved from 2633(d). There is no change in requirements.

(d)(1)(B) - The proposed language requiring the demonstration of efficiency of a manual monitoring system has been deleted because it duplicates a requirement previously located in 2633(d) and now found in 2634(d).

Section 2635. Installation and Testing Requirements for All New Underground Storage Tanks

(a)(2)(A) - This amendment changes the requirement for cathodic protection systems to be tested under the direction of a cathodic protection tester to a requirement that they be tested by such a tester because Federal Rule 40 CFR 280.31 (b) of the federal regulations require the *inspection.*

(a)(5) - This amendment clarifies that interstitial monitors must either have third-party certification or be approved by the State Water Board. Because this is a monitoring device, it is required by EPA's regulations to have a third-party certification. The amendment also specifies that a tank test is not required if the tank is tested by another means deemed by the State Water Board to be equivalent to a tank integrity test.

(b)(2)(D) - The purpose of this amendment is to add a new alternative in satisfying the overfill prevention requirement. US EPA amended its "spill and overfill prevention" requirements (40 CFR 280.20c) on April 1990 to allow additional means to satisfy the requirement. The proposed amendment makes state regulations more consistent with federal requirements.

(b)(3)(proposed) - Federal Rule 40 CFR 280.30(a) requires owners and operators to ensure that spills and overfills do not occur. This language is moved to 2712(k) to clarify that it applies to all USTs, not just new tanks.

(b)(3)(modified) - The conditions under which a local agency may waive the overfill prevention requirements have been modified to comply with Federal Rule 40 CFR 280.20(c)(2)(ii). The requirements can only be waived when inputs to the tank do not exceed 25 gallons at any one time.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a)(1), (2) & (3) - These sections are reorganized and reworded to clarify circumstances under *which exceptions may be made to the secondary containment requirement for piping.* There is no change in requirements.

(a)(3)(C) - This amendment specifies that only one check valve may be located directly below and as close as practical to the suction pump. The modification was made to ensure that state regulations are no less stringent than federal regulations [(40 CFR 280.41(b)(2)].

(b) - The provisions of this subsection are moved to section 2636(a) for better organization.

(f)(1) - This amendment specifies that continuous monitoring systems must meet the specification of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

ARTICLE 4. EXISTING UNDERGROUND STORAGE TANK MONITORING REQUIREMENTS

Section 2640. General Applicability of Article

(d) - This subsection is added to clarify the applicability of the farm tank monitoring option available under H&SC §25292(b)(5)(A). That option allows farm tanks between 1,100 and 5,000 gallons to be monitored using monthly tank gauging and triennial tank testing as long

as they meet the specifications in paragraph 7 of subdivision (c) of section 2641 as it read on August 13, 1985. Tanks above 2,000 gallons cannot meet these specifications. Moreover, federal Rule 40 CFR 280.43(b) specifies that weekly manual tank gauging can only be used on tanks up to 2,000 gallons, and that for tanks greater than 550 gallons, tank testing must be performed at least annually. Without the change, the state program would be less stringent than the federal program for this item.

Section 2641. Monitoring Program Requirements

(a) - The proposed language regarding the farm tank monitoring option has been moved to 2640(d) and modified to reflect federal rules. Authorization is given to local agencies to reduce frequency of monitoring when environmental conditions make it impractical, physically impossible, or life threatening to conduct the monitoring. This authorization was in the 1985 version of the regulations and was omitted in error in 1991.

(i) - Existing language requires owners or operators to obtain prompt approval for their monitoring programs. "Prompt" is subjective; therefore, reference to the word is removed. The requirement to obtain local agency approval for the replacement, repair, upgrade, or closure of a tank is consistent with other regulations in this chapter.

(k) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2643. Non-Visual Monitoring/Qualitative Release Detection Methods

This section has undergone several changes and reorganization as a result of comments made by several people during the 45-day public comment period.

(b) - This subsection had requirements for (1) monthly tank monitoring for methods such as automatic tank gauges and for (2) monitoring program consisting of annual tank testing and monthly inventory reconciliation. This subsection has been expanded to include more specific monitoring options as follows:

1) Automatic tank gauging is the same as (1) above except it is done after product delivery or when the tank is filled to within 10 percent of the highest operating level. The reason the tank owner is allowed to do the test within 10 percent of the highest operating level is to provide time for the tank product to stabilize before the test. Product dispensing can take place during this period without interfering with test accuracy.

2) Automatic tank gauging (ATG) and manual inventory reconciliation (MIR). This is a new option. MIR is required because the ATG can be performed when the level is only three feet, thus providing backup monitoring.

3) Statistical inventory reconciliation and tank testing. This is a new option and it is proposed is because the method has received third-party approval in accordance with EPA procedures; it should, therefore, be available to tank owners. The specifics on SIR are given in section 2646.1 and the specifics on tank testing are given in section 2643.1.

4) MIR and tank testing. This replaces (2) above. MIR is covered in section 2645 and tank testing is covered in 2643.1. This is not a change, but a move for better organization.

5) Other test methods can be approved if they comply with section 2643(f)(which requires the method to receive a third-party evaluation. The purpose of adding this option is to ensure that as technology advances, new and improved testing methods may be considered for use by tank owners.

(d) and (e) - Language is added to allow the LIA to approve a substitute test for piping which cannot be isolated for testing purposes. Without this alternative, there would be no way to test the piping.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

For easier comprehension and better organization, this section brings together the requirements applicable to both volumetric and non-volumetric tank integrity tests

Section 2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) - This amendment specifies that interstitial monitors must have third-party certification. This specification is made to clarify the fact that interstitial monitors are a type of qualitative release detection and to ensure compliance with standards set for other qualitative release detection methods.

Section 2645. Manual Tank Gauging and Testing for Small Tanks

(a) - This amendment is made to allow a 72-hour gauging period as indicated in Table 4.1. and to be consistent with EPA regulations.

(b) - The amendments to this subsection expand the manual tank gauging method to allow tanks between 551 and 2,000 gallons to be monitored without receiving a tank integrity test if the gauging period is 60 hours instead of the usual 48 hours. This change is made to allow tank owners another option for monitoring and to be consistent with EPA regulations.

(d)(1) - This amendment is made to be consistent with the changes made in subsections (a_ and (b) above.

(d)(3) - This amendment is made to be consistent with the changes made in subsections (a_ and (b) above.

Section 2646. Manual Inventory Reconciliation

(c)(1)(D) - The requirement to use a substance on a dipstick is modified to only require the use of the substance if the product-level readings on the dipstick are otherwise illegible. It was pointed out by some local agencies that use of these substances is not always necessary to obtain accurate readings.

(f) - The purpose of this amendment is to require the tank owner or operator to record the actions taken under subsection (e) which will be available to the local agency for review.

(i) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

Section 2646.1. Statistical Inventory Reconciliation

(a) - This amendment requires the tank owner to obtain approval from the local agency before statistical inventory reconciliation may be used as a monitoring method. Some tank owners have started using it without the knowledge of the local agency and some local agencies do not allow its use in their jurisdictions.

(b) - To avoid confusion regarding the differences between manual and statistical inventory reconciliation, language describing the daily measurement requirements for statistical inventory reconciliation is replaced with a reference to the identical requirements in the section on manual inventory reconciliation. There is no change in the proposed requirements.

(c) - The purpose of the proposed amendment is to clarify what monitoring information the tank owner or operator must supply to the SIR vendor. The proposed amendment also does not require the first three reports from the SIR vendor to meet the requirements. The SIR vendor needs a certain number of data points to perform SIR. The regulations allow the tank owner to provide the minimum number of data points by using previous months' data. Also, the proposed changes allow a three-month grace period to give the tank owner time to learn how to use SIR before the ~~performance criteria~~ requirements pertaining to inconclusive results must be met.

(d)(4) - The requirements in this subdivision are reorganized for clarity and are made to allow more time to obtain a recalibration of the dispenser meter when necessary. The existing time allotment is insufficient to be able to schedule recalibration.

(e) - This amendment makes some minor clarifications and also replaces the phrase, "confirms the result of the first report" with "does not indicate a tight system". The purpose for this change is to remove the uncertainty in the case where the first report failed the tank and the second report was inconclusive. The second report does not confirm the results of the first report, but does not indicate the tank to be tight. Therefore, the tank must be declared non-tight.

(f) - The addition of language in this subsection is for clarification only. The text implies that the owner or operator who reports a suspected release is the person who will conduct additional tests. This additional language makes this clear.

(h)- This amendment requires a piping tightness test ~~and, if necessary,~~ or a tank integrity test if a statistical inventory reconciliation report indicates inconclusive results or possible unauthorized releases. This clarification is necessary ~~because if the leak is in the piping, the regulations should not require a tank test.~~ so that the proper portion of the UST system will be tightness tested. For example, if the piping is expected to be untight, then the piping should be tightness tested.

(j) - This amendment removes the requirement that the tank owner make a statement to the local agency under penalty of perjury. It is unnecessary and difficult to enforce.

(k) - This language was moved from subsection (d)(4) because it applies to all of section 2646.1 and not just subsection (d).

ARTICLE 5. RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

Section 2650. Reporting and Recording Applicability

(d) - The word "record" was changed to "report" to account for a 1991 amendment in the UST law (AB 1954, Ch 1138), which added a new definition of unauthorized release under section 25295.5. Previously, the hazardous substance had to be stored in the tank and escape from the tank to be considered an unauthorized release. This amendment added spills or overfills that occur when a tank is being filled as a new type of unauthorized release. To be consistent with this statutory amendment, section 2650 must be changed to require release reporting, rather than recording.

Section 2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(d) - Editorial changes are made for clarity; no new requirements are made.

(e) - This requirement was combined with section 2655(e).

Section 2655. Free Product Removal Requirements

(e) - The amendment to this section requires the submittal of free product removal reports to the local agency within 45 days of confirmation of an unauthorized release. Existing language requires the report but does not specify that it must be submitted to the local agency. The local agency needs the reports to oversee cleanup. The timeframe of 45 days is proposed because this is ample time in which to compile a report and submit it to the local agency.

ARTICLE 6. UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products, technology, and procedures.

Section 2660. General Applicability of Article

(a) - This modification clarifies that any manufacturer specifications which exceed the requirements of this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) - This modification clarifies that repairs are made only following a release of product. (See also the definition of "repair.") Many activities which are considered repairs may in fact be preventive maintenance or "upgrades". Section 25296 of the H&SC places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) - This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) - This subsection is added to reference the new section which contains requirements for interior lining.

(e) - This subsection is added to reference the new section which contains requirements for bladder installation.

(f), (g), (h), and (i) - These subsections are moved from subsections (d), (e), (f), and (g) respectively. No substantive changes are made.

(j) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) - A requirement is added that state local agencies cannot approve repairs or upgrades ~~when~~ if the tank is not sound and if the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of Federal Rule 40 CFR 281.32(d).

(l) - This language is moved from subsection 2661(f).

(m) - This language is moved from subsection 2661(g).

(n) - This language is moved from subsection 2661(j).

Section 2661. Requirements for Repairing Underground Storage Tanks

(a) - This subsection is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make the repair and place the tank back into operation without cleaning up the release. Such action could be intentional or unintentional.

(b) - The first sentence in this subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) - This language is moved from subsection 2660(g) and reworded for clarity with no substantive change.

(d) - This language is moved from 2661(i) with no substantive change.

(e) - This language is moved from 2661(m) and reworded for clarity. In addition, language is added to comply with requirements in Federal Rule 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5.

(f) - This language is moved from 2661(n) and reworded for clarity with no substantive change.

(g) - This language is moved from 2661(p) with no substantive change.

Section 2662. Requirements for Upgrading Underground Storage Tanks

(a) - This subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d).

(b) - The language in this subsection is moved from 2662(a).

(c)(1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection

method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) - The language in this subsection is moved from 2662(c) with no substantive change.

(e) - *The language in this subsection is moved from 2662(b)(4).* ~~*A requirement is added that all upgraded tanks must be closed at the end of their operational life.*~~

Section 2663. Requirements for Interior Tank Lining

A new section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

(a) - ~~The language regarding the overfill prevention equipment waiver is changed to meet federal requirements. (See 2635[b][3]).~~ ? This is 2665

(b) - The language in this subsection is moved from 2661(c) with no substantive change.

(c) - The language in this subsection is moved from 2661(d) with no substantive change.

(d) - This subsection is added for reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) - The language in this subsection is moved from 2661(h) with no substantive change.

(f) - The language in this subsection is taken from 2661(k) and reworded to reflect reorganization with no substantive change.

(g) - The language in this subsection is moved from 2661(n) with no substantive change.

(h) - The language in this subsection is moved from 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

Section 2664. Requirements for Using Bladder Systems

For clarification, the option to upgrade tanks using bladder systems has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(a) - Language is added in this subsection to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language.

(b) - This requirement was moved from 2662(d)(4). There are no changes.

(c) - The requirement has been added to provide cathodic protection for steel tanks and to comply with the federal upgrade requirements found in Federal Rule 40 CFR 280.21. Without requiring cathodic protection, bladders would have to be removed to allow internal inspection

at five or ten year intervals. Pre-lining structural limiting criteria have been eliminated when the interior lining is capable of providing structural support.

Section 2665. Requirements for Spill and Overfill Prevention Equipment

The language is moved from subsection 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements (see 2635[b][3]).

Section 2666. Requirements for Upgrading Underground Piping

The language is moved from section 2664. The only substantive changes are in subsection (c) and (h).

(c) - This amendment requires that, not later than December 22, 1998, automatic line leak detectors must shut down the pump automatically if the leak detector fails or is disconnected. If the automatic line leak detector is disconnected intentionally or unintentionally or fails, then the piping could be operated without leak detection. To prevent this, the pump is wired into the leak detector which serves the purpose of requiring the leak detector to be fixed and at the same time not allowing the piping system to be used.

(h) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e).

ARTICLE 7. CLOSURE REQUIREMENTS

Section 2670. General Applicability of Article

(f) - This amendment requires tank owners to obtain approval from the local agency for their temporary or permanent closure proposals. Existing language requires the submittal of the proposals, but not the prior approval. Prior approval is necessary to ensure that tank owners remove their tanks in accordance with state and local requirements. Also, local agencies are required to maintain tank closure information in their files. Without a record of closure approval, the files would be incomplete and out of compliance with federal requirements [40 CFR 280.74(c)].

(i) - "Decommissioned tanks" is added to this language to exempt such tanks which were taken out of service before January 1, 1984 from closure requirements. The definition of "decommissioned tanks" was included in the April 1993 proposed amendments; however, the term was inadvertently omitted from this section.

Section 2671. Temporary Closure Requirements

(b) - The requirement to continue corrosion monitoring is added because it is a federal requirement in Federal Rules 40 CFR 280.70(a) and 281.36.

(d) - This amendment adds the phrase, "over 12 months" to be consistent with the federal regulations.

Section 2672. Permanent Closure Requirements

(c)(2) - Subsection (b)(2) requires tanks undergoing permanent closure to be inerted. The language is repeated in subsection (c) for tanks which are being closed in place rather than removed. This addition was necessary in order to be consistent and to ensure that the regulations are no less stringent than federal regulations [40 cfr, 280.71(c) and 281.36(b).

ARTICLE 10. PERMIT APPLICATION, QUARTERLY REPORT, AND TRADE SECRET REQUIREMENTS

Section 2710. General Applicability of Article

(b) - The word "operator" is changed to "representative" because the owner is responsible for filing the UST permit application.

Section 2712. Permit Conditions

(b) - The requirement that records of repairs and upgrades be maintained for the life of the UST is added to comply with Federal Rules 40 CFR 280.33(f) and 281.32(e).

(h) & (i) - Two subsections are added requiring the local agency to provide the permittee with a list of written permit conditions including a condition stating that the owner and operator are subject to all applicable provisions of the law and regulations and that the permit and conditions be maintained at the facility. These requirements are added to ensure that the permit serves as a communication link between the local agency, permittee (owner) and operator. The need for this requirement was identified during negotiations with EPA regarding program compliance monitoring procedures and during local agency office visits.

(j) - The requirement that all primary containment be product-tight is added to comply with Federal Rule 40 CFR 280.32, which requires that the UST be compatible with the substance stored. The Health and Safety Code definition of "product-tight" includes the concept of "compatibility". Previously, the requirement that the UST be product-tight was only in reference to new and upgraded tanks. This revision makes it clear that all USTs must comply with the product-tight requirement.

(k) - The requirement that owners and operators ensure that spills and overfills do not occur is moved from 2635(b)(3) and 2663(b) to comply with Federal Rule 40 CFR 280.30(a). This change clarifies that the requirement applies to all USTs, not just new or upgraded tanks.

DRAFT

9/14/93

FINAL STATEMENT OF REASONS

UNDERGROUND STORAGE TANK REGULATIONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). This chapter establishes requirements for the design, construction, installation, monitoring, testing, repair and upgrade, permitting and closure of USTs as well as release reporting, investigation, and initial abatement after unauthorized releases from USTs. The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

UST regulations originally became effective in August 1985. Amendments were made and the existing version of the regulations was adopted on August 9, 1991. On April 2, 1993, the State Water Board proposed numerous amendments to existing regulations and began a 45-day comment period which ended on May 17, 1993. A public hearing was held on June 14, 1993, at which oral and written comments were received. A summary of those comments and the State Water Board's responses are included in the Final Statement of Reasons.

Although many modifications have been made, they are substantially related to the original proposals and a reasonable member of the directly affected public could expect that these types of changes could be made.

The proposed changes do not mandate prescriptive standards referenced in section 11346.14 of the Government Code. The specific purpose of each proposed change is explained as well as the necessity for the change. Grammatical and editorial changes are not itemized here, but are identified by underline and strikeout in the modified text.

This Final Statement of Reasons includes only those amendments made to the originally proposed text noticed on April 2, 1993.

ARTICLE 1. DEFINITION OF TERMS

Section 2611. Additional Definitions

"Bladder system" is modified to include rigid material because bladder systems can be constructed of both types of material.

"Compatible" is added using language in federal regulations. The term is used in the definition of membrane liner and without a definition the meaning may not be clear.

"Connected piping" is added using language in federal regulations. The term is used in the definition of "substantially beneath the surface of the ground" and without a definition, the meaning may not be clear.

"Excavation zone" is added using language in federal regulations. The term is used in section 2641 and without a definition, the meaning may not be clear.

"Existing underground storage tank" - This definition is modified to clarify which tanks are considered "existing tanks" and therefore subject to the requirements in Article 4 and all other applicable requirements. All USTs installed before 1/1/84 are considered existing tanks, and with only one exception, all tanks installed on or after that date are <u>not</u> existing tanks (i.e.,

they are "new" tanks, see below.) The exception is for motor vehicle fuel tanks over 1,100 gallons located at a farm and used for agricultural purposes. These tanks were not regulated until 1/1/87. So, such tanks installed between 1/1/84 and 1/1/87 are also considered existing tanks. The previously proposed language was vague as to this exception.

"Farm tank" is modified for clarity. Existing language can be interpreted two ways. It could be describing a combination of tanks which, together, hold no more than 1,100 gallons or it could be describing a combination of tanks which, individually, hold no more than 1,100 gallons. For some owners of farm tanks, the distinction is significant and means the difference between having regulated or unregulated tanks.

"Free product" is added using language in federal regulations. The term is used in Article 6, and without a definition, the meaning may not be clear.

"Hydraulic lift tank" was deleted from the regulations in the original proposals because the State Water Board intended to remove these tanks from the list of exempted tanks in section 2621. Because the decision has been made to include hydraulic lift tanks in the list of exemptions, the definition is reworded to agree with the federal definition and is reinstated.

"Inconclusive" is added because that term is used in the text to define results of statistical inventory reconciliation.

"Leak threshold" is amended to clarify the fact that it is not an allowable leak rate. Leak threshold is a number used to determine the leak detection ability of the test method. All leaking tanks need to be fixed regardless of the rate of the leak.

"Maintenance" is added using language in federal regulations. The term is used throughout the text of the regulations and without a definition as it applies to underground storage tanks, the meaning may not be clear.

"Manual inventory reconciliation" is modified to reflect the fact that it is used for determining if a leak has occurred and not only for investigating product loss.

"New underground storage tank" is modified to make clear that the terms "new" and "existing underground storage tank" are mutually exclusive and all encompassing of the regulated universe of tanks. This modification is made in response to concerns expressed by US EPA that the previous language could be construed as to leave a void between the two definitions and consequently allow some tanks which should be subject to new requirements to comply with only the existing tank requirements.

"Operational life" is added using language in federal regulations. The term is used in Article 6 to refer to a tank's useable life. Without a definition, the meaning may not be clear.

"Person" is modified to make clear that all entities regulated under federal law are also regulated under California law. This change is made in response to US EPA concerns expressed during review of the California UST program pursuant to Federal Rule 40 CFR 281 that the statutory definition does not clearly name the same set of regulated entities.

"Release detection method" is modified at the request of EPA to include "release detection system" because that term is used in the text of the regulations.

"Repair" is added because the term is used extensively in the regulations. Provisions of Article 6 differentiate between repairs and upgrades and without a definition, the requirements for each may be misunderstood.

"Statistical inventory reconciliation" is amended for clarity.

"Statistical inventory reconciliation provider" is added because the term is used in the proposed text which may not be clear without a definition.

"Storm water or wastewater collection system" is added using language in federal regulations. These terms are used in Article 6 and without a definition, their meaning may not be clear.

"Upgrade" is added because existing regulations require tank owners ~~are required~~ to upgrade their tanks by December 22, 1998, and this term is used in the text in Article 6. Without a definition, the meaning may be unclear.

ARTICLE 2. GENERAL PROVISIONS

Section 2620. General Intent, Content, Applicability, and Implementation of Regulations

In addition to editorial changes in subsections (b) and (d), the following modification is made to this section:

(d) - This subsection provides an overview of applicability of each article. The reference to Article 11 is added to bring this section up to date. Article 11 was added during the 1991 revision, but section 2620(d) was not updated at that time.

Section 2621. Exemptions from the Regulations

In addition to a change for clarity in (13) and renumbering (15) and (16), the following modifications are made:

(a) - This modification clarifies that the listed tanks are not exempt from California rules if subject to federal regulation.

(a)(3) The exemption for tanks in vaults or basements has been moved to (a)(15) so that the hydraulic lift tank exemption could be returned to this subdivision where it was located before the proposed amendments were made. The exemption for hydraulic lift tanks is modified to include all such tanks and not only those with a capacity of under 110 gallons as specified in existing regulations.

Several commenters addressed the proposed amendment to section 2621(a)(3) which would have resulted in the regulation of all hydraulic lift tanks in California. The State Water Board has made the decision to modify this section to exempt all hydraulic lift tanks from regulation.

The decision to exempt hydraulic lift tanks is based on the following:

- They are not used for storage as that term is used in the definition of "underground storage tank" and therefore, do not fit the definition.

- The threat to human health and the environment is minimal because the tanks contain small amounts of regulated substances. The risk of contamination is relatively low in comparison to underground storage tanks which store large quantities of hazardous substances.

- They are self-monitoring. When a leak occurs, the machinery they support ceases to operate.

- The cost impact in regulating these tanks would be severe for both the owners and the implementing agencies. Owners would need to retrofit existing tanks which may be located underground under large buildings. The tanks would need to be monitored using some method other that those used for underground storage tanks because current monitoring methods are not practical for hydraulic lift tanks. The potentially overwhelmingly large number of tanks would require considerable effort on the part of implementing agencies, with little discernable environmental benefit. Regulation of these tanks would divert agency resources from other, more serious health threats.

(a)(15) - The exemption for tanks located in vaults or basements is moved from subdivision (3) to (3).

(a)(16) - The exemption for structures exempted by section 25281(x) H&SC is moved from subdivision (15).

ARTICLE 3. NEW UNDERGROUND STORAGE TANK DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS

Section 2630. General Applicability of Article

(a) - The purpose of this paragraph is to accommodate cases where tanks were installed after the effective date of the overall UST regulatory program (1/1/84) but before later more stringent requirements were added by statutory revision. The new language eliminates the unnecessary reference to the effective date of the regulations.

Section 2631. Design and Construction Requirements for New Underground Storage Tanks

INSERT (C)

(d)(9) - This paragraph is added to meet the requirements of the federal program, as specified in Federal Rule 40 CFR 280.43, pertaining to UST systems using excavation barriers as a means of providing secondary containment. A requirement is added to ensure that secondary containment is above the ground water and not in a 25-year flood plain unless the containment and monitoring designs are for use under these conditions. The purpose is to prevent the secondary containment from being flooded.

(h) - The language added in the April proposed amendments is removed because the change is not necessary to be no less stringent than EPA requirements as originally thought.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(c)(1)(D) - This subdivision is amended to require analysis of liquid around a tank only if necessary to determine if there has been an unauthorized release and only if the method of analysis is approved by the local agency. There are occasions when it is unnecessary to go to

the expense of analyzing liquid in order to know if there has been an unauthorized release (e.g., visible leaks). Requiring approval of the local agency to use a specific method of field analysis will allow the local agency to authorize the use of methods that will work for site-specific cases.

(d)(1)(B) and (C) - Requirements are added to include the name and model number of monitoring equipment and a plot plan in monitoring program written procedures.

This specificity is necessary in order for local agencies to identify monitoring equipment used by owners and operators and to identify exact locations where monitoring is conducted.

(e) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2633. Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

(d) - The requirement that the owner or operator demonstrate that the leak interception and detection system is capable of detecting a release before it escapes into the environment pertains to monitoring requirements for the system, as opposed to design and construction requirements, and is, accordingly, moved to Section 2634(d).

Section 2634. Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

(d) - Language in this subsection is moved from 2633(d). There is no change in requirements.

(d)(1)(B) - The proposed language requiring the demonstration of efficiency of a manual monitoring system has been deleted because it duplicates a requirement previously located in 2633(d) and now found in 2634(d).

Section 2635. Installation and Testing Requirements for All New Underground Storage Tanks

(a)(2)(A) - This amendment changes the requirement for cathodic protection systems to be tested under the direction of a cathodic protection tester to a requirement that they be tested by such a tester because Federal Rule 40 CFR 280.31 (b) of the federal regulations require the inspection.

(a)(5) - This amendment clarifies that interstitial monitors must either have third-party certification or be approved by the State Water Board. Because this is a monitoring device, it is required by EPA's regulations to have a third-party certification. The amendment also specifies that a tank test is not required if the tank is tested by another means deemed by the State Water Board to be equivalent to a tank integrity test.

(b)(2)(D) - The purpose of this amendment is to add a new alternative in satisfying the overfill prevention requirement. US EPA amended its "spill and overfill prevention" requirements (40 CFR 280.20c) on April 1990 to allow additional means to satisfy the requirement. The proposed amendment makes state regulations more consistent with federal requirements.

(b)(3)(proposed) - Federal Rule 40 CFR 280.30(a) requires owners and operators to ensure that spills and overfills do not occur. This language is moved to 2712(k) to clarify that it applies to all USTs, not just new tanks.

(b)(~~4~~)(5)(modified) - The conditions under which a local agency may waive the overfill prevention requirements have been modified to comply with Federal Rule 40 CFR 280.20(c)(2)(ii). The requirements can only be waived when inputs to the tank do not exceed 25 gallons at any one time.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a)(1), (2) & (3) - These sections are reorganized and reworded to clarify circumstances under which exceptions may be made to the secondary containment requirement for piping. There is no change in requirements.

(a)(3)(C) - This amendment specifies that only one check valve may be located directly below and as close as practical to the suction pump. The modification was made to ensure that state regulations are no less stringent than federal regulations [(40 CFR 280.41(b)(2)].

(b) - The provisions of this subsection are moved to section 2636(a) for better organization.

(f)(1) ~~(c)(2)(A)~~ - This amendment specifies that continuous monitoring systems must meet the specification of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

ARTICLE 4. EXISTING UNDERGROUND STORAGE TANK MONITORING REQUIREMENTS

Section 2640. General Applicability of Article

(d) - This subsection is added to clarify the applicability of the farm tank monitoring option available under H&SC §25292(b)(5)(A). That option allows farm tanks between 1,100 and 5,000 gallons to be monitored using monthly tank gauging and triennial tank testing as long as they meet the specifications in paragraph 7 of subdivision (c) of section 2641 as it read on August 13, 1985. Tanks above 2,000 gallons cannot meet these specifications. Moreover, federal Rule 40 CFR 280.43(b) specifies that weekly manual tank gauging can only be used on tanks up to 2,000 gallons, and that for tanks greater than 550 gallons, tank testing must be performed at least annually. Without the change, the state program would be less stringent than the federal program for this item.

Section 2641. Monitoring Program Requirements

(a) - The proposed language regarding the farm tank monitoring option has been moved to 2640(d) and modified to reflect federal rules. Authorization is given to local agencies to reduce frequency of monitoring when environmental conditions make it impractical, physically impossible, or life threatening to conduct the monitoring. This authorization was in the 1985 version of the regulations and was omitted in error in 1991.

(i) - Existing language requires owners or operators to obtain prompt approval for their monitoring programs. "Prompt" is subjective; therefore, reference to the word is removed. The requirement to obtain local agency approval for the replacement, repair, upgrade, or closure of a tank is consistent with other regulations in this chapter.

(k) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2643. Non-Visual Monitoring/Qualitative Release Detection Methods

This section has undergone several changes and reorganization as a result of comments made by several people during the 45-day public comment period.

2643(b) - This subsection had requirements for (1) monthly tank monitoring for methods such as automatic tank gauges and for (2) monitoring program consisting of annual tank testing and monthly inventory reconciliation. This subsection has been expanded to include more specific monitoring options as follows:

1) Automatic tank gauging is the same as (1) above except it is done after product delivery or when the tank is filled to within 10 percent of the highest operating level. The reason the tank owner is allowed to do the test within 10 percent of the highest operating level is to provide time for the tank product to stabilize before the test. Product dispensing can take place during this period without interfering with test accuracy.

2) Automatic tank gauging (ATG) and manual inventory reconciliation (MIR). This is a new option. MIR is required because the ATG can be performed when the level is only three feet, thus providing backup monitoring.

3) Statistical inventory reconciliation and tank testing. This is a new option and it is proposed is because the method has received third-party approval in accordance with EPA procedures; it should, therefore, be available to tank owners. The specifics on SIR are given in section 2646.1 and the specifics on tank testing are given in section 2643.1.

4) MIR and tank testing. This replaces (2) above. MIR is covered in section 2645 and tank testing is covered in 2643.1. This is not a change, but a move for better organization.

5) Other test methods can be approved if they comply with section 2643(f)(which requires the method to receive a third-party evaluation. The purpose of adding this option is to ensure that as technology advances, new and improved testing methods may be considered for use by tank owners.

(4) #(5)

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

For easier comprehension and better organization, this section brings together the requirements applicable to both volumetric and non-volumetric tank integrity tests

Section 2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) - This amendment specifies that interstitial monitors must have third-party certification. This specification is made to clarify the fact that interstitial monitors are a type of qualitative

release detection and to ensure compliance with standards set for other qualitative release detection methods.

Section 2645. Manual Tank Gauging and Testing for Small Tanks

(a) - This amendment is made to allow a 72-hour gauging period as indicated in Table 4.1. and to be consistent with EPA regulations.

(b) - The amendments to this subsection expand the manual tank gauging method to allow tanks between 551 and 2,000 gallons to be monitored without receiving a tank integrity test if the gauging period is 60 hours instead of the usual 48 hours. This change is made to allow tank owners another option for monitoring and to be consistent with EPA regulations.

(d)(1) - This amendment is made to be consistent with the changes made in subsections (a_ and (b) above.

(d)(3) - This amendment is made to be consistent with the changes made in subsections (a_ and (b) above.

Section 2646. Manual Inventory Reconciliation

(c)(1)(D) - The requirement to use a substance on a dipstick is modified to only require the use of the substance if the product-level readings on the dipstick are otherwise illegible. It was pointed out by some local agencies that use of these substances is not always necessary to obtain accurate readings.

(f) - The purpose of this amendment is to require the tank owner or operator to record the actions taken under subsection (e) which will be available to the local agency for review.

(i) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

Section 2646.1. Statistical Inventory Reconciliation

(a) - This amendment requires the tank owner to obtain approval from the local agency before statistical inventory reconciliation may be used as a monitoring method. Some tank owners have started using it without the knowledge of the local agency and some local agencies do not allow its use in their jurisdictions.

(b) - To avoid confusion regarding the differences between manual and statistical inventory reconciliation, language describing the daily measurement requirements for statistical inventory reconciliation is replaced with a reference to the identical requirements in the section on manual inventory reconciliation. There is no change in the proposed requirements.

(c) - The purpose of the proposed amendment is to clarify what monitoring information the tank owner or operator must supply to the SIR vendor. The proposed amendment also does not require the first three reports from the SIR vendor to meet the requirements. The SIR vendor needs a certain number of data points to perform SIR. The regulations allow the tank owner to provide the minimum number of data points by using previous months' data. Also,

the proposed changes allow a three-month grace period to give the tank owner time to learn how to use SIR before the performance criteria must be met.

(d)(4) - The requirements in this subdivision are reorganized for clarity and are made to allow more time to obtain a recalibration of the dispenser meter when necessary. The existing time allotment is insufficient to be able to schedule recalibration.

(e) - This amendment makes some minor clarifications and also replaces the phrase, "confirms the result of the first report" with "does not indicate a tight system". The purpose for this change is to remove the uncertainty in the case where the first report failed the tank and the second report was inconclusive. The second report does not confirm the results of the first report, but does not indicate the tank to be tight. Therefore, the tank must be declared non-tight.

(f) - The addition of language in this subsection is for clarification only. The text implies that the owner or operator who reports a suspected release is the person who will conduct additional tests. This additional language makes this clear.

(h)- This amendment requires a piping tightness test and, if necessary, a tank integrity test if a statistical inventory reconciliation report indicates inconclusive results or possible unauthorized releases. This clarification is necessary because if the leak is in the piping, the regulations should not require a tank test.

(j) - This amendment removes the requirement that the tank owner make a statement to the local agency under penalty of perjury. It is unnecessary and difficult to enforce.

(k) - This language was moved from subsection (d)(4) because it applies to all of section 2646.1 and not just subsection (d).

ARTICLE 5. RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

Section 2650. Reporting and Recording Applicability

(d) - The word "record" was changed to "report" to account for a 1991 amendment in the UST law (AB 1954, Ch 1138), which added a new definition of unauthorized release under section 25295.5. Previously, the hazardous substance had to be stored in the tank and escape from the tank to be considered an unauthorized release. This amendment added spills or overfills that occur when a tank is being filled as a new type of unauthorized release. To be consistent with this statutory amendment, section 2650 must be changed to require release reporting, rather than recording.

Section 2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(d) - Editorial changes are made for clarity; no new requirements are made.

Section 2655. Free Product Removal Requirements

(e) - The amendment to this section requires the submittal of free product removal reports to the local agency within 45 days of confirmation of an unauthorized release. Existing language requires the report but does not specify that it must be submitted to the local agency. The

local agency needs the reports to oversee cleanup. The timeframe of 45 days is proposed because this is ample time in which to compile a report and submit it to the local agency.

ARTICLE 6. UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products, technology, and procedures.

Section 2660. General Applicability of Article

(a) - This modification clarifies that any manufacturer specifications which exceed the requirements of this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) - This modification clarifies that repairs are made only following a release of product. (See also the definition of "repair.") Many activities which are considered repairs may in fact be preventive maintenance or "upgrades". Section 25296 of the H&SC places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) - This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) - This subsection is added to reference the new section which contains requirements for interior lining.

(e) - This subsection is added to reference the new section which contains requirements for bladder installation.

(f), (g), (h), and (i) - These subsections are moved from subsections (d), (e), (f), and (g) respectively. No substantive changes are made.

(j) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) - A requirement is added that local agencies cannot approve repairs or upgrades when the tank is not sound and the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of Federal Rule 40 CFR 281.32(d).

(l) - This language is moved from subsection 2661(f).

(m) - This language is moved from subsection 2661(g).

(n) - This language is moved from subsection 2661(j).

Section 2661. Requirements for Repairing Underground Storage Tanks

(a) - This subsection is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make

the repair and place the tank back into operation without cleaning up the release. Such action could be intentional or unintentional.

(b) - The first sentence in this subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) - This language is moved from subsection 2660(g) and reworded for clarity with no substantive change.

(d) - This language is moved from 2661(i) with no substantive change.

(e) - This language is moved from 2661(m) and reworded for clarity. In addition, language is added to comply with requirements in Federal Rule 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5.

(f) - This language is moved from 2661(n) and reworded for clarity with no substantive change.

(g) - This language is moved from 2661(p) with no substantive change.

Section 2662. Requirements for Upgrading Underground Storage Tanks

(a) - This subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d).

(b) - This subsection is moved from 2662(a).

(c)(1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) - This subsection is moved from 2662(c) with no substantive change.

(e) - This subsection is moved from 2662(b)(4). A requirement is added that all upgraded tanks must be closed at the end of their operational life.

Section 2663. Requirements for Interior Tank Lining

A new section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

(a) - The language regarding the overfill prevention equipment waiver is changed to meet federal requirements. (See 2635[b][3].)

(b) - This subsection is moved from 2661(c) with no substantive change.

(c) - This subsection is moved from 2661(d) with no substantive change.

(d) - This subsection is added for reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) - This subsection is moved from 2661(h) with no substantive change.

(f) - The language in this subsection is taken from 2661(k) and reworded to reflect reorganization with no substantive change.

(g) - This subsection is moved from 2661(n) with no substantive change.

(h) - This subsection is moved from 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

Section 2664. Requirements for Using Bladder Systems

For clarification, the option to upgrade tanks using bladder systems has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(a) - Language is added in this subsection to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language.

(c) - The requirement has been added to provide cathodic protection for steel tanks and to comply with the federal upgrade requirements found in Federal Rule 40 CFR 280.21. Without requiring cathodic protection, bladders would have to be removed to allow internal inspection at five or ten year intervals. Pre-lining structural limiting criteria have been eliminated when the interior lining is capable of providing structural support.

Section 2665. Requirements for Spill and Overfill Prevention Equipment

The language is moved from subsection 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements (see 2635[b][3]).

Section 2666. Requirements for Upgrading Underground Piping

The language in this section is moved from section 2664. The only substantive changes are in subsection (c) and (h).

(c) - This amendment requires that, not later than December 22, 1998, automatic line leak detectors must shut down the pump automatically if the leak detector fails or is disconnected. If the automatic line leak detector is disconnected intentionally or unintentionally or fails, then the piping could be operated without leak detection. To prevent this, the pump is wired into the leak detector which serves the purpose of requiring the leak detector to be fixed and at the same time not allowing the piping system to be used.

(h) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e).

ARTICLE 7. CLOSURE REQUIREMENTS

Section 2670. General Applicability of Article

(f) - This amendment requires tank owners to obtain approval from the local agency for their temporary or permanent closure proposals. Existing language requires the submittal of the proposals, but not the prior approval. Prior approval is necessary to ensure that tank owners remove their tanks in accordance with state and local requirements. Also, local agencies are required to maintain tank closure information in their files. Without a record of closure approval, the files would be incomplete and out of compliance with federal requirements [40 CFR 280.74(c)].

(i) - "Decommissioned tanks" is added to this language to exempt such tanks which were taken out of service before January 1, 1984 from closure requirements. The definition of "decommissioned tanks" was included in the April 1993 proposed amendments; however, the term was inadvertently omitted from this section.

Section 2671. Temporary Closure Requirements

(b) - The requirement to continue corrosion monitoring is added because it is a federal requirement in Federal Rules 40 CFR 280.70(a) and 281.36.

(d) - This amendment adds the phrase, "over 12 months" to be consistent with the federal regulations.

Section 2672. Permanent Closure Requirements

(c)(2) - Subsection (b)(2) requires tanks undergoing permanent closure to be inerted. The language is repeated in subsection (c) for tanks which are being closed in place rather than removed. This addition was necessary in order to be consistent and to ensure that the regulations are no less stringent than federal regulations [40 cfr, 280.71(c) and 281.36(b).

ARTICLE 10. PERMIT APPLICATION, QUARTERLY REPORT, AND TRADE SECRET REQUIREMENTS

Section 2710. General Applicability of Article

(b) - The word "operator" is changed to "representative" because the owner is responsible for filing the UST permit application.

Section 2712. Permit Conditions

(b) - The requirement that records of repairs and upgrades be maintained for the life of the UST is added to comply with Federal Rules 40 CFR 280.33(f) and 281.32(e).

(h) & (i) - Two subsections are added requiring the local agency to provide the permittee with a list of written permit conditions including a condition stating that the owner and operator are subject to all applicable provisions of the law and regulations and that the permit and

conditions be maintained at the facility. These requirements are added to ensure that the permit serves as a communication link between the local agency, permittee (owner) and operator. The need for this requirement was identified during negotiations with EPA regarding program compliance monitoring procedures and during local agency office visits.

(j) - The requirement that all primary containment be product-tight is added to comply with Federal Rule 40 CFR 280.32, which requires that the UST be compatible with the substance stored. The Health and Safety Code definition of "product-tight" includes the concept of "compatibility". Previously, the requirement that the UST be product-tight was only in reference to new and upgraded tanks. This revision makes it clear that all USTs must comply with the product-tight requirement.

(k) - The requirement that owners and operators ensure that spills and overfills do not occur is moved from 2635(b)(3) and 2663(b) to comply with Federal Rule 40 CFR 280.30(a). This change clarifies that the requirement applies to all USTs, not just new or upgraded tanks.

by such a tester because Federal Rule 40 CFR 280.31 (b) of the federal regulations require the inspection.

(a)(5) - This amendment clarifies that interstitial monitors must either have third-party certification ~~or be approved by the State Water Board~~. Because this is a monitoring device, it is required by EPA's regulations to have a third-party certification. The amendment also specifies that a tank test is not required if the tank is tested by another means deemed by the State Water Board to be equivalent to a tank integrity test.

(b)(2)(D) - The purpose of this amendment is to add a new alternative in satisfying the overfill prevention requirement. US EPA amended its "spill and overfill prevention" requirements (40 CFR 280.20c) on April 1990 to allow additional means to satisfy the requirement. The proposed amendment makes state regulations more consistent with federal requirements.

(b)(3)(proposed) - Federal Rule 40 CFR 280.30(a) requires owners and operators to ensure that spills and overfills do not occur. This language is moved to 2712(k) to clarify that it applies to all USTs, not just new tanks.

(b)(3)(modified) - The conditions under which a local agency may waive the overfill prevention requirements have been modified to comply with Federal Rule 40 CFR 280.20(c)(2)(ii). The requirements can only be waived when inputs to the tank do not exceed 25 gallons at any one time.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping 2631? moved

(a)(1), (2) & (3) - These sections are reorganized and reworded to clarify circumstances under which exceptions may be made to the secondary containment requirement for piping. There is no change in requirements.

(a)(3)(C) - This amendment specifies that only one check valve may be located directly below and as close as practical to the suction pump. The modification was made to ensure that state regulations are no less stringent than federal regulations [(40 CFR 280.41(b)(2)].

(b) - The provisions of this subsection are moved to section 2636(a) for better organization.

(f)(1) - This amendment specifies that continuous monitoring systems must meet the specification of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

ARTICLE 4. EXISTING UNDERGROUND STORAGE TANK MONITORING REQUIREMENTS

Section 2640. General Applicability of Article

(d) - A new subsection is added to clarify the applicability of the farm tank monitoring option available under H&SC section 25292(b)(5)(A). That option allows farm tanks between 1,100 and 5,000 gallons to be monitored using monthly tank gauging and triennial tank testing. Federal Rule 40 CFR 280.43(b) specifies that weekly manual tank gauging can only be used on tanks up to 2,000 gallons, and that for tanks greater than 550 gallons, tank testing must be performed at least annually. Without the change, the state program would be less stringent than the federal program for this line item.

Section 2641. Monitoring Program Requirements

(a) - The proposed language regarding the farm tank monitoring option has been moved to 2640(d) and modified to reflect federal rules. Authorization is given to local agencies to reduce frequency of monitoring when environmental conditions make it impractical, physically impossible, or life threatening to conduct the monitoring. This authorization was in the 1985 version of the regulations and was omitted in error in 1991.

(i) - Existing language requires owners or operators to obtain prompt approval for their monitoring programs. "Prompt" is subjective; therefore, reference to the word is removed. The requirement to obtain local agency approval for the replacement, repair, upgrade, or closure of a tank is consistent with other regulations in this chapter.

(k) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2643. Non-Visual Monitoring/Qualitative Release Detection Methods

This section has undergone several changes and reorganization as a result of comments made by several people during the 45-day public comment period.

(b) - This subsection has requirements for 1) monthly tank monitoring for methods such as automatic tank gauges and, 2) monitoring programs consisting of annual tank testing and monthly inventory reconciliation. This subsection has been expanded to include more specific monitoring options as follows:

1) Automatic tank gauging is the same as (1) above except it is done after product delivery or when the tank is filled to within 10 percent of the highest operating level. The reason the tank owner is allowed to do the test within 10 percent of the highest operating level is to provide time for the tank product to stabilize before the test. Product dispensing can take place during this period without interfering with test accuracy.

2) Automatic tank gauging (ATG) and manual inventory recondiliation (MIR) together is a new monitoring option. MIR is required because the ATG can be performed when the level is only three feet, thus providing backup monitoring.

3) Statistical inventory reconciliation and tank testing together are a new monitoring option which is allowed because SIR and tank test methods must receive third-party evaluations for compliance with federal requirements. The specifics on SIR and tank testing are given in sections 2646.1 and 2643.1, respectively.

4) MIR and tank testing replaces 2) above. MIR is covered in secion 2645 and tank testing is covered in section 2643.1. This is not a new monitoring option, but has been moved and reqorded for better comprehension and organization.

5) Other test methods may be approved if they comply with section 2643(f), which requires all methods to receive third-party evluations. The purpose of adding this option is to ensure that as technology advances, new and improved testing methods may be considered for use by tank owners.

(c) - [redacted]

(d) and (e) - Language is added to allow LIAs to approve a substitute test for piping which cannot be isolated for testing purposes. Without this alternative, there would be no way to test this piping.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

For easier comprehension and better organization, this section brings together the requirements applicable to both volumetric and nonvolumetric tank integrity tests. There are no new requirements in this section; the language is moved from existing section 2643.

Section 2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) - This amendment specifies that interstitial monitors must have third-party certification. This specification is made to clarify the fact that interstitial monitors are a type of qualitative release detection and to ensure compliance with standards set for other qualitative release detection methods.

Section 2645. Manual Tank Gauging and Testing for Small Tanks

(a) - This amendment is made to allow a 72-hour gauging period as indicated in Table 4.1. and to be consistent with EPA regulations.

(b) - The amendments to this subsection expand the manual tank gauging method to allow tanks between 1,001 and 2,000 gallons to be monitored without receiving a tank integrity test if the gauging period is 60 hours instead of the usual 48 hours. This change is made to allow tank owners another option for monitoring and to be consistent with EPA regulations.

(d)(1) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

(d)(3) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

Section 2646. Manual Inventory Reconciliation

(c)(1)(D) - The requirement to use a substance on a dipstick is modified to only require the use of the substance if the product-level readings on the dipstick are otherwise illegible. It was pointed out by some local agencies that use of these substances is not always necessary to obtain accurate readings.

(f) - The purpose of this amendment is to require the tank owner or operator to record the actions taken under subsection (e) which will be available to the LIA for review.

(i) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

Section 2646.1. Statistical Inventory Reconciliation.

(a) - This amendment requires the tank owner to obtain approval from the LIA before statistical inventory reconciliation may be used as a monitoring method. Some tank owners have started using it without the knowledge of the LIA and some LIA's do not allow its use in their jurisdictions.

(b) - To avoid confusion regarding the differences between manual and statistical inventory reconciliation, language describing the daily measurement requirements for statistical inventory reconciliation is replaced with a reference to the identical requirements in the section on manual inventory reconciliation. There is no change in the proposed requirements.

(c) - The purpose of the proposed amendments is to clarify what monitoring information the tank owner or operator must supply to the SIR vendor. The proposed amendment also does not require the first three reports from the SIR vendor to meet the requirements. The SIR vendor needs a certain number of data points to perform SIR. The regulations allow the tank owner to provide the minimum number of data points by using previous months' data. Also, the proposed changes allow a three-month grace period to give the tank owner time to learn how to use SIR before the requirements pertaining to inconclusive results must be met.

(d)(4) - The requirements in this subdivision are reorganized for clarity and are made to allow more time to obtain a recalibration of the dispenser meter when necessary. The existing time allotment is insufficient to be able to schedule recalibration.

(e) -This amendment specifies that Article 5 must be complied with if a statistical inventory reconciliation report indicates a non-tight system and if the previous month's report was inconclusive or fail.

(f) - The addition of language in this subsection is for clarification only. The text implies that it is the owner or operator who reports a suspected release is the person who will conduct additional tests. This additional language makes this clear.

(h)- This amendment requires a piping tightness test or tank integrity test if a statistical inventory reconciliation report indicates inconclusive results or possible unauthorized releases. This clarification is necessary so that the correct portion of the UST system will be tested.

(j) - This amendment requires the owner or operator to report to the LIA annually, the result of statistical inventory reconciliation reports for the previous 12 months.

(k) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

ARTICLE 5. RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

Section 2650. Reporting and Recording Applicability

(d) - The word "record" was changed to "report" to account for a 1991 amendment in the UST law (AB 1954, Ch 1138), which added a new definition of unauthorized release under section 25295.5. Previously, the hazardous substance had to be stored in the tank and escape from the tank to be considered an unauthorized release. This amendment added spills or overfills that occur when a tank is being filled as a new type of unauthorized release. To be consistent with this statutory amendment, section 2650 must be changed to require release reporting, rather than recording.

(e)(1) - [redacted]

Section 2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(d) - Editorial changes are made for clarity; no new requirements are made.

(e) - This requirement was moved and combined with section 2655(e).

Section 2655. Free Product Removal Requirements

(e) - The amendment to this section requires the submittal of free product removal reports to the local agency within 45 days of confirmation of an unauthorized release. Existing language requires the report but does not specify that it must be submitted to the local agency. The local agency needs the reports to oversee cleanup. The timeframe of 45 days is proposed because this is ample time in which to compile a report and submit it to the local agency.

ARTICLE 6. UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products, technology, and procedures.

Section 2660. General Applicability of Article

(a) - This modification clarifies that any manufacturer specifications which exceed the requirements of this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) - This modification clarifies that repairs are made only following a release of product. (See also the definition of "repair.") Many activities which are considered repairs may in fact be preventive maintenance or "upgrades". Section 25296 of the H&SC places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) - This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) - This subsection is added to reference the new section which contains requirements for interior lining.

(e) - This subsection is added to reference the new section which contains requirements for bladder installation.

is a substantive change - soil samples

(f), (g), (h), and (i) - These subsections are moved from subsections (d), (e), (f), and (g) respectively. No substantive change.

(j) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) - A requirement is added that local agencies cannot approve repairs or upgrades if the tank is not sound and if the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of Federal Rule 40 CFR 281.32(d).

(l) - This language is moved from subsection 2661(f).

(m) - This language is moved from subsection 2661(g).

(n) - This language is moved from subsection 2661(j).

Section 2661. Requirements for Repairing Underground Storage Tanks

(a) - This subsection is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make the repair and place the tank back into operation without following up on cleaning up the release. Such action could be intentional or unintentional. ?

(b) - The first sentence in this subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) - This language is moved from subsection 2660(g) and reworded for clarity with no substantive change.

(d) - This language is moved from subsection 2661(i) with no substantive change.

(e) - This language is moved from subsection 2661(m) and reworded for clarity. In addition, language is added to comply with requirements in Federal Rule 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5. moved to (e) from (m) ?

(f) - This language is moved from subsection 2661(n) and reworded for clarity with no substantive change.

(g) - This language is moved from subsection 2661(p) with no substantive change.

after (g) deleted ?

Section 2662. Requirements for Upgrading Underground Storage Tanks

(a) - This subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). moved ? from original language ?

(b) - This subsection is moved from 2662(a).

(c)(1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection

method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) - This language is moved from subsection 2662(c) with no substantive change.

(e) - This language is moved from subsection 2662(b)(4).

Section 2663. Requirements for Interior Tank Lining

A new section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

(a) -

(b) - This language is moved from subsection 2661(c) with no substantive change.

(c) - This language is moved from subsection 2661(d) with no substantive change.

(d) - This language is added for reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) - This language is moved from subsection 2661(h) with no substantive change.

(f) - This language is taken from section 2661(k) and reworded to reflect reorganization with no substantive change.

(g) - This language is moved from subsection 2661(n) with no substantive change.

(h) - This language is moved from subsections 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

Section 2664. Requirements for Using Bladder Systems

For clarification, the option to upgrade tanks using bladder systems has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(a) - Language is added in this subseciton to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language in section

(b) - This requirement was moved from seciton 2662(d)(4) with no changes.

(c) - The requirement has been added to require cathodic protection for steel tanks with bladder systems and to comply with the federal upgrade requirements found in Federal Rule 40 CFR 280.21. If cathodic protection were not required, bladders would have to be removed to allow internal inspection at five or ten-year intervals. Pre-lining structural limiting criteria have been eliminated when the interior lining is capable of providing structural support.

(d) - This subsection is added to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language. [redacted]

Section 2665. Requirements for Spill and Overfill Prevention Equipment

The requirements in this new section were moved from section 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under subsection 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements (see section 2635[b][3]).

Section 2666. Requirements for Upgrading Underground Piping

The language is moved from section 2664. The only substantive changes are in subsections (c) and (h).

(c) - This amendment requires that, not later than December 22, 1998, automatic line leak detectors must shut down the pump automatically if the leak detector fails or is disconnected. If the automatic line leak detector is disconnected intentionally or unintentionally or fails, then the piping could be operated without leak detection. To prevent this, the pump is wired into the leak detector which serves the purpose of requireing the leak detector to be fixed, and at the same time, not allowing the piping system to be used.

ARTICLE 7. CLOSURE REQUIREMENTS

Section 2670. General Applicability of Article

(f) - This amendment requires tank owners to obtain approval from the local agency for their temporary or permanent closure proposals. Existing language requires the submittal of the proposals, but not the prior approval. Prior approval is necessary to ensure that tank owners remove their tanks in accordance with state and local requirements. Also, local agencies are required to maintain tank closure information in their files. Without a record of closure approval, the files would be incomplete and out of compliance with federal requirements [40 CFR 280.74(c)].

(i) - "Decommissioned tanks" is added to this language to exempt such tanks which were taken out of service before January 1, 1984 from closure requirements. The definition of "decommissioned tanks" was included in the April 1993 proposed amendments; however, the term was inadvertently omitted from this section.

Section 2671. Temporary Closure Requirements

(b) - The requirement to continue corrosion monitoring is added because it is a federal requirement in Federal Rules 40 CFR 280.70(a) and 281.36.

(d) - This amendment adds the phrase, "over 12 months" to be consistent with federal regulations [redacted]

Section 2672. Permanent Closure Requirements

(c)(2) - Subsection (b)(2) requires tanks undergoing permanent closure to be inerted. The language is repeated in subsection (c) for tanks which are being closed in place rather than

SOR 9/14/93

Insert Section

(1) 2631(c) Language is added to this section to clarify that striker plates attached to the bottom of drop tubes satisfies the requirement to have a striker plate. Normally they are affixed to the bottom of the tank

(2) 2632(c)(2)(A) This amendment specifies that continuous monitoring systems must meet the specifications of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

(3) 2632(d)(2) Language is added to allow the UST to approve a longer period of time to prepare a response plan. Some tank owners may have good reasons why they need more than 30 days to prepare such plans.

Insert Section

(4) 2643(d) Language is added to allow the LIA to approve a substitute test for piping. The reason is to allow testing of pipeline by using a tank integrity test when the pipe cannot be isolated for testing using a pipeline tester.

(5) 2643(e) (nice same as above)

(6) 2652(e) This requirement was removed and combined with Section 2655(e) for simplicity and clarity.

(7) 2664(b) This requirement was moved from 2662(d)(4). There are no changes.

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FINAL STATEMENT OF REASONS FOR CHANGES MADE AFTER THE 15-DAY COMMENT PERIOD ENDING OCTOBER 4, 1993

Section 2611. Additional Definitions

The words "wastewater treatment" have been added between "private" and "facility" in the definition of "wastewater treatment tank." This clarifies that the reference to a "private facility" is meant to apply only to a private "wastewater treatment" facility. This change is made in response to a US EPA suggestion, and is intended to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(b)(2) & (d)(1) and 280.12.

Section 2621. Exemptions to the Regulations

(a)(11) The exemption for radioactive materials tanks has been modified to match the federal exemption. This change is made to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(c)(2).

(c) This section is modified to require that a permit be obtained prior to a change in use that causes a previously exempt tank to become regulated. The previous requirement was to obtain a permit within 120 days following such change in use. This modification is in response to US EPA concerns that the previous language provided a grace period to such tanks, which is less stringent than the federal requirements.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(e) INSERT (1)

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a) INSERT (2)

(e) "

Section 2641. Monitoring Program Requirements

(a) Language requiring local agencies to reduce the frequency of monitoring has been removed. This is in response to US EPA concerns that a reduction in monitoring may make California requirements less stringent than federal requirements. It should be noted that this language had been added primarily to address problems in monitoring remote emergency generators, emergency generators serving hospitals, etc. Language has been changed in section 2643(f) to allow less frequent monitoring (but at least monthly) of emergency generators. This does not affect federal consistency, because federal rules do not require monitoring of emergency generators, and the monthly minimum meets federal minimum monitoring requirements.

(k) INSERT (3)

Section 2643. Non-Visual Monitoring/Quantitative Release Detection Methods

(d) INSERT (4)

(e) "

Section 2646.1. Statistical Inventory Reconciliation

(b) INSERT (5)

Section 2650. Reporting and Recording Applicability

(e) The requirement to "record" the conditions specified in Section 2650(e) is added in response to US EPA comments. The rationale for the comment is that certain conditions listed in this section (e.g., monitoring results) must be entered in the facility records. This change clarifies that the reporting of such conditions does not eliminate the need to keep records. See 40 CFR 280.34(b).

Section 2663. Interior Tank Lining Requirements

(a) INSERT (6)

Section 2666. Requirements for Upgrading Underground Piping

(c) INSERT (7)

Section 2670. General Applicability of Article

(f) The language ". . . for such shorter period of time as may be approved. . .." is changed to ". . . "within a shorter period of time approved. . ." for clarification

as suggested by US EPA.

(i) Language has been added to clarify that decommissioned tanks must be properly closed when the local agency so directs. This is added to meet the requirement of 40 CFR 281.36(c).

Section 2671. Temporary Closure Requirements

(a)(1) INSERT (6)

(e) The applicable requirements from 281.36(a)(1) relating to temporarily-closed USTs have been added as 2671(e). This is in response to US EPA comments, and to ensure that the California requirements are no less stringent than federal requirements.

SOR FOR POST 15 day Changes.

INSERT (1) 2632(e) This section is modified for clarity the phrase "over the implementation process..." is deleted because it does not help resolve the problem (unauthorized release) the phrase "the owner or operator" is added to clarify who is responsible to comply with the requirement

INSERT (3) 2641(k) The term "close the installation process" is relocated for clarity

INSERT (4) 2643(d)+(e) This section is amended to allow other equivalent test methods for situations where piping cannot be tested otherwise without a great deal of expense.

INSERT (5) 2646.1(b) there was no valid reason to make an exception for SIR because the data gathering for SIR is the same as for MIR

10-19-93

INSERT (2)

2636(a) + (e)

Secondary containment is not required for new piping regardless of the type of hazardous substance stored if the piping is described as in subsections (a)(1) through (a)(3).

The EPA OUST office in Washington DC provided an interpretation of the federal requirements via the OUST office in Region 9 on 10/6/93. The interpretation states that European-style suction piping is intrinsically safe and, therefore, does not need secondary containment even though it is new and may contain non-petroleum hazardous substances. EPA considers single-walled European-style suction piping to be equivalent to secondary containment.

EPA does not require secondary containment for new piping described as follows regardless of the type of hazardous substance stored:

1) vent or tank riser piping, provided that the primary containment has overfill protection equipment capable of restricting or shutting-off flow to the tank at or before 95% capacity.

2) vapor recovery piping if designed so that it cannot contain liquid-phase product.

EPA does not require secondary containment (or leak detection or upgrading) for piping that does not routinely contain hazardous substances. Piping as described in items 1) and 2) above do not routinely contain hazardous substances.

For example, a newly-installed waste oil tank with gravity flow input piping would require secondary containment for the tank but

not for the piping if the below-grade piping is sloped so that the entire contents of the piping automatically drains back to the tank and if one of the following is applicable:

1) the UST system is equipped with overfill prevention equipment capable of restricting or shutting-off delivery to the tank at or before 95% capacity

2) The tank inlet exists in an observable area, the spill container is adequate to collect any overfill, and the tank system is filled by transfers of no more than 25 gallons at one time.

In the above scenario, the single-walled input piping must have corrosion protection and be monitored once every 2 years. Monitoring is waived for ~~overfill~~ drops. Monitoring at a pressure designated by the test equipment manufacturer shall be capable of detecting a minimum release equivalent to 0.1 gph difined at 40 psi. If the piping cannot be isolated from the tank for testing purposes, the piping shall be tested once using the same standards applicable to an overfilled volumetric tank integrity test.

The SWRCB is implementing these requirements ~~in order to ensure the federal requirements~~ i.e. to comply with federal requirements.

INSERT (6)

2063 (a) the word "repair" is replaced with "repaired a second time with the interior lining material". This change is made to be consistent with chp 6.7, Section 25296 of the H&SC

INSERT (7) 2666 (c) this amendment was made to make the regulation no less stringent than the federal regulations

INSERT (8) 2671 (a)(1) this amendment was made to require compliance with only the applicable provision in the referenced chapters

SOR for Changes Made in Resp to Comments Made on 9/12 Following 15-day Comment

STATEMENT OF REASONS

Final Changes in Regulations in Response to USEPA Comments

2611 The words "wastewater treatment" have been added between "private" and "facility" in the definition of "wastewater treatment tank. This clarifies that the reference to a "private facility" is meant only to apply to a private "wastewater treatment" facility. This change is made in response to a USEPA suggestion, and is intended to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(b)(2) & (d)(1) and 280.12.

2621

(a)(11) The exemption for radioactive materials tanks has been modified to match the federal exemption. This change is made to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(c)(2).

(c) This section is modified to require that a permit be obtained <u>prior</u> to a change in use that causes a previously exempt tank to become regulated. The previous requirement was to obtain a permit within 120 days <u>following</u> such change in use. This modification is in response to USEPA concerns that the previous language provided a grace period to such tanks, which is less stringent than the federal requirements.

2641(a) Language requiring local agencies to reduce the frequency of monitoring has been removed in response to USEPA concerns that such reduction could cause the California requirements to be less stringent than federal requirements. It should be noted that this language had been added primarily to address problems in monitoring remote emergency generators, emergency generators serving hospitals, and similar. Language has been changed elsewhere that allows emergency generators to be monitored less frequently [but at least monthly, see Section 2643(f)]. This does not affect federal consistency, because federal rules do not require monitoring of emergency generators, and the monthly minimum meets federal minimum monitoring requirements.

Not needed for SOR because the change is removed

2650(e) The requirement to "record" the conditions specified in Section 2650(e) is added in response to USEPA comments. The rationale for the comment is that certain conditions listed in this section (e.g., monitoring results) must be entered in the facility records. This change clarifies that the reporting of such conditions does not eliminate the need to keep records. See 40 CFR 280.34(b).

2670(f) The language ". . . for such shorter period of time as may be approved. . ." is changed to ". . .within a shorter period of time approved. . ." for clarification as suggested by USEPA.

(i) Language has been added clarifying that decommissioned tanks must be properly closed when the local agency so directs. This is added to meet the requirement of 40 CFR 281.36(c).

2671(e) The applicable requirements from 281.36(a)(1) relating to temporarily-closed USTs have been added as 2671(e). This is in response to USEPA comments, and to ensure that the California requirements are no less stringent than federal requirements.

9/29/93

FINAL STATEMENT OF REASONS

UNDERGROUND STORAGE TANK REGULATIONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). This chapter establishes requirements for the design, construction, installation, monitoring, testing, repair and upgrade, permitting and closure of USTs as well as release reporting, investigation, and initial abatement after unauthorized releases from USTs. The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

UST regulations originally became effective in August 1985. Amendments were made and the existing version of the regulations was adopted on August 9, 1991. On April 2, 1993, the State Water Board proposed numerous amendments to existing regulations and began a 45-day comment period which ended on May 17, 1993. A public hearing was held on June 14, 1993, at which oral and written comments were received. A summary of those comments and the State Water Board's responses are included in the Final Statement of Reasons.

Although many modifications have been made, they are substantially related to the original proposals and a reasonable member of the directly affected public could expect that these types of changes could be made.

The proposed changes do not mandate prescriptive standards referenced in section 11346.14 of the Government Code. The specific purpose of each proposed change is explained as well as the necessity for the change. Grammatical and editorial changes are not itemized here, but are identified by underline and strikeout in the modified text.

This Final Statement of Reasons includes only those amendments made to the originally proposed text noticed on April 2, 1993.

ARTICLE 1. DEFINITION OF TERMS

Section 2611. Additional Definitions

"Bladder system" is modified to include rigid material because these systems can be constructed of both types of material.

"Compatible" is added using language in federal regulations. The term is used in the definition of membrane liner and without a definition the meaning may not be clear.

"Connected piping" is added using language in federal regulations. The term is used in the definition of "substantially beneath the surface of the ground" and without a definition, the meaning may not be clear.

"Excavation zone" is added using language in federal regulations. The term is used in section 2641 and without a definition, the meaning may not be clear.

"Existing underground storage tank" - This definition is modified to clarify which tanks are considered "existing tanks" and therefore subject to the requirements in Article 4 and all other applicable requirements. All USTs installed before 1/1/84 are considered existing tanks, and with only one exception, all tanks installed on or after that date are <u>not</u> existing tanks (i.e.,

they are "new" tanks, see below.) The exception is for motor vehicle fuel tanks over 1,100 gallons located at a farm and used for agricultural purposes. These tanks were not regulated until 1/1/87. So, such tanks installed between 1/1/84 and 1/1/87 are also considered existing tanks. The previously proposed language was vague as to this exception.

"Farm tank" is modified for clarity. Existing language can be interpreted two ways. It could be describing a combination of tanks which, together, hold no more than 1,100 gallons or it could be describing a combination of tanks which, individually, hold no more than 1,100 gallons. For some owners of farm tanks, the distinction is significant and means the difference between having regulated or unregulated tanks.

"Free product" is added using language in federal regulations. The term is used in Article 6, and without a definition, the meaning may not be clear.

"Hydraulic lift tank" was deleted from the regulations in the original proposals because the State Water Board intended to remove these tanks from the list of exempted tanks in section 2621. Because the decision has been made to include hydraulic lift tanks in the list of exemptions, the definition is reworded to agree with the federal definition and is reinstated.

"Inconclusive" is added because that term is used in the text to define results of statistical inventory reconciliation.

"Leak threshold" is amended to clarify the fact that it is not an allowable leak rate. Leak threshold is a number used to determine the leak detection ability of the test method. All leaking tanks need to be fixed regardless of the rate of the leak.

"Maintenance" is added using language in federal regulations. The term is used throughout the text of the regulations and without a definition as it applies to underground storage tanks, the meaning may not be clear.

"Manual inventory reconciliation" is modified to reflect the fact that it is used for determining if a leak has occurred and not only for investigating product loss.

"New underground storage tank" is modified to make clear that the terms "new" and "existing underground storage tank" are mutually exclusive and all encompassing of the regulated universe of tanks. This modification is made in response to concerns expressed by US EPA that the previous language could be construed as to leave a void between the two definitions and consequently allow some tanks which should be subject to new requirements comply with only the existing tank requirements.

"Operational life" is added using language in federal regulations. The term is used in Article 6 to refer to a tank's useable life. Without a definition, the meaning may not be clear.

"Person" is modified to make clear that all entities regulated under federal law are also regulated under California law. This change is made in response to US EPA concerns expressed during review of the California UST program pursuant to Federal Rule 40 CFR 281 that the statutory definition does not specifically name the same set of regulated entities.

"Release detection method" is modified at the request of EPA to include "release detection system" because that term is used in the text of the regulations.

"Repair" is added because the term is used extensively in the regulations. Provisions of Article 6 differentiate between repairs and upgrades and without a definition, the requirements for each may be misunderstood.

"Statistical inventory reconciliation" is amended for clarity.

"Statistical inventory reconciliation provider" is added because the term is used in the proposed text which may not be clear without a definition.

"Storm water or wastewater collection system" is added using language in federal regulations. These terms are used in existing language in section 2621, and without a definition, their meaning may not be clear.

"Upgrade" is added to the definitions because it is used in Article 6 to describe what tank owners are required to do to their tanks by December 22, 1998. Without a definition, the meaning of "upgrade" may be unclear.

ARTICLE 2. GENERAL PROVISIONS

Section 2620. General Intent, Content, Applicability, and Implementation of Regulations

In addition to editorial changes in subsections (b) and (d), the following modification is made to this section:

(d) - This subsection provides an overview of applicability of each article. The reference to Article 11 is added to bring this section up to date. Article 11 was added during the 1991 rulemaking, but section 2620(d) was not updated at that time.

Section 2621. Exemptions from the Regulations

In addition to a change for clarity in subsection (a)(13) and renumbering subsections (a)(15) and (a)(16), the following modifications are made:

(a) - This modification clarifies that the listed tanks are not exempt from California rules if subject to federal regulation.

(a)(3) The exemption for tanks in vaults or basements has been moved to (a)(15) so that the hydraulic lift tank exemption could be returned to its location before the proposed amendments were made. The exemption for hydraulic lift tanks is modified to include all such tanks and not only those with a capacity of under 110 gallons as specified in existing regulations.

Several commenters addressed the proposed amendment to section 2621(a)(3) which would have resulted in the regulation of all hydraulic lift tanks in California. The State Water Board has made the decision to modify this section to exempt all hydraulic lift tanks from regulation.

The decision to exempt hydraulic lift tanks is based on the following:

- They are not used for storage as that term is used in the definition of "underground storage tank" and therefore, do not fit the definition.

- The threat to human health and the environment is minimal because the tanks contain small amounts of regulated substances. The risk of contamination is relatively low in comparison to underground storage tanks which store large quantities of hazardous substances.

- They are self-monitoring. When a leak occurs, the machinery they support ceases to operate.

- The cost impact in regulating these tanks would be severe for both the owners and the implementing agencies. Owners would need to retrofit existing tanks which may be located underground under large buildings. The tanks would need to be monitored using some method other that those used for underground storage tanks because current monitoring methods are not practical for hydraulic lift tanks. The potentially overwhelmingly large number of tanks would require considerable effort on the part of implementing agencies, with little discernable environmental benefit. Regulation of these tanks would divert agency resources from other, more serious health threats.

(a)(15) - The exemption for tanks located in vaults or basements is moved from subdivision (3).

(a)(16) - The exemption for structures exempted by section 25281(x) H&SC is moved from subdivision (15).

ARTICLE 3. NEW UNDERGROUND STORAGE TANK DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS

Section 2630. General Applicability of Article

(a) - The purpose of this paragraph is to accommodate cases where tanks were installed after the effective date of the overall UST regulatory program (1/1/84), but before later, more stringent requirements were added by statutory revision. The new language eliminates the unnecessary reference to the effective date of the regulations.

Section 2631. Design and Construction Requirements for New Underground Storage Tanks

(c) - Language is added to this section to clarify that striker plates attached to the bottom of drop tubes satisfies the requirement to have a striker plate in all USTs. Normally, striker plates are affixed to the bottom of a tank. At least one manufacturer has developed a plate which can be attached to the drop tube and provides the same protection as striker plates which meet the specifications of section 2631(c). Allowing the use of this new technology is environmentally safe and provides tank owners with an option which is less expensive than emptying and retrofitting a tank with a striker plate.

(d)(9) - This paragraph is added to meet the requirements of the federal program, as specified in Federal Rule 40 CFR 280.43, pertaining to UST systems using excavation barriers as a means of providing secondary containment. A requirement is added to ensure that secondary containment is above the ground water and not in a 25-year flood plain unless the containment and monitoring designs are for use under these conditions. The purpose is to prevent the secondary containment from being flooded.

(h) - The language added in the April proposed amendments is removed because the change is not necessary to be no less stringent than EPA requirements as originally thought.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(c)(1)(D) - This subdivision is amended to require analysis of liquid around a tank only if necessary to determine if there has been an unauthorized release and only if the method of analysis is approved by the local agency. There are occasions when it is unnecessary to go to the expense of analyzing liquid in order to know if there has been an unauthorized release (e.g., visible leaks). Requiring approval of the local agency to use a specific method of field analysis will allow the local agency to authorize the use of methods that will work for site-specific cases.

(c)(2)(A) - This amendment specifies that continuous monitoring systems must meet the specifications of section 2643(f). Without this specificity, this language may be incorrectly interpreted to allow monitoring systems not meeting the requirements of section 2643(f) to be used.

(d)(1)(B) and (C) - Requirements are added to include the name and model number of monitoring equipment and a plot plan in monitoring program written procedures. This specificity is necessary in order for local agencies to identify monitoring equipment used by owners and operators and to identify exact locations where monitoring is conducted.

(d)(2) - Language is added to allow the LIA to approve a longer period of time in which an owner must prepare a response plan. Some tank owners may have valid reasons for needing more than 30 days to prepare such plans.

(e) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2633. Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

(d) - The requirement that the owner or operator demonstrate that the leak interception and detection system is capable of detecting a release before it escapes into the environment pertains to monitoring requirements for the system, as opposed to design and construction requirements, and is, accordingly, moved to Section 2634(d).

Section 2634. Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

(d) - Language in this subsection is moved from 2633(d). There is no change in requirements.

(d)(1)(B) - The proposed language requiring the demonstration of efficiency of a manual monitoring system has been deleted because it duplicates a requirement previously located in 2633(d) and now found in 2634(d).

Section 2635. Installation and Testing Requirements for All New Underground Storage Tanks

(a)(2)(A) - This amendment changes the requirement for cathodic protection systems to be tested <u>under the direction of</u> a cathodic protection tester to a requirement that they be tested

by such a tester because Federal Rule 40 CFR 280.31 (b) of the federal regulations require the inspection.

(a)(5) - This amendment clarifies that interstitial monitors must either have third-party certification or be approved by the State Water Board. Because this is a monitoring device, it is required by EPA's regulations to have a third-party certification. The amendment also specifies that a tank test is not required if the tank is tested by another means deemed by the State Water Board to be equivalent to a tank integrity test.

(b)(2)(D) - The purpose of this amendment is to add a new alternative in satisfying the overfill prevention requirement. US EPA amended its "spill and overfill prevention" requirements (40 CFR 280.20c) on April 1990 to allow additional means to satisfy the requirement. The proposed amendment makes state regulations more consistent with federal requirements.

(b)(3)(proposed) - Federal Rule 40 CFR 280.30(a) requires owners and operators to ensure that spills and overfills do not occur. This language is moved to 2712(k) to clarify that it applies to all USTs, not just new tanks.

(b)(3)(modified) - The conditions under which a local agency may waive the overfill prevention requirements have been modified to comply with Federal Rule 40 CFR 280.20(c)(2)(ii). The requirements can only be waived when inputs to the tank do not exceed 25 gallons at any one time.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a)(1), (2) & (3) - These sections are reorganized and reworded to clarify circumstances under which exceptions may be made to the secondary containment requirement for piping. There is no change in requirements.

(a)(3)(C) - This amendment specifies that only one check valve may be located directly below and as close as practical to the suction pump. The modification was made to ensure that state regulations are no less stringent than federal regulations [(40 CFR 280.41(b)(2)].

(b) - The provisions of this subsection are moved to section 2636(a) for better organization.

(f)(1) - This amendment specifies that continuous monitoring systems must meet the specification of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

ARTICLE 4. EXISTING UNDERGROUND STORAGE TANK MONITORING REQUIREMENTS

Section 2640. General Applicability of Article

(d) - A new subsection is added to clarify the applicability of the farm tank monitoring option available under H&SC section 25292(b)(5)(A). That option allows farm tanks between 1,100 and 5,000 gallons to be monitored using monthly tank gauging and triennial tank testing. Federal Rule 40 CFR 280.43(b) specifies that weekly manual tank gauging can only be used on tanks up to 2,000 gallons, and that for tanks greater than 550 gallons, tank testing must be performed at least annually. Without the change, the state program would be less stringent than the federal program for this line item.

Section 2641. Monitoring Program Requirements

(a) - The proposed language regarding the farm tank monitoring option has been moved to 2640(d) and modified to reflect federal rules. Authorization is given to local agencies to reduce frequency of monitoring when environmental conditions make it impractical, physically impossible, or life threatening to conduct the monitoring. This authorization was in the 1985 version of the regulations and was omitted in error in 1991.

(i) - Existing language requires owners or operators to obtain prompt approval for their monitoring programs. "Prompt" is subjective; therefore, reference to the word is removed. The requirement to obtain local agency approval for the replacement, repair, upgrade, or closure of a tank is consistent with other regulations in this chapter.

(k) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2643. Non-Visual Monitoring/Qualitative Release Detection Methods

This section has undergone several changes and reorganization as a result of comments made by several people during the 45-day public comment period.

(b) - This subsection has requirements for 1) monthly tank monitoring for methods such as automatic tank gauges and, 2) monitoring programs consisting of annual tank testing and monthly inventory reconciliation. This subsection has been expanded to include more specific monitoring options as follows:

1) Automatic tank gauging is the same as (1) above except it is done after product delivery or when the tank is filled to within 10 percent of the highest operating level. The reason the tank owner is allowed to do the test within 10 percent of the highest operating level is ~~to provide time for the tank product to stabilize before the test.~~ Product dispensing can take place during ~~this~~ period ~~without interfering with test accuracy~~. writing for the stabilizing

2) Automatic tank gauging (ATG) and manual inventory reconciliation (MIR) together is a new monitoring option. MIR is required because the ATG can be performed when the level is only three feet, thus providing backup monitoring.

3) Statistical inventory reconciliation and tank testing together are a new monitoring option which is allowed because SIR and tank test methods must receive third-party evaluations for compliance with federal requirements. The specifics on SIR and tank testing are given in sections 2646.1 and 2643.1, respectively.

4) MIR and tank testing replaces 2) above. MIR is covered in section 2645 and tank testing is covered in section 2643.1. This is not a new monitoring option, but has been moved and reworded for better comprehension and organization.

5) Other test methods may be approved if they comply with section 2643(f), which requires all methods to receive third-party evaluations. The purpose of adding this option is to ensure that as technology advances, new and improved testing methods may be considered for use by tank owners.

(c) - [redacted]

(d) and (e) - Language is added to allow LIAs to approve a substitute test for piping which cannot be isolated for testing purposes. Without this alternative, there would be no way to test this piping.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

For easier comprehension and better organization, this section brings together the requirements applicable to both volumetric and nonvolumetric tank integrity tests. There are no new requirements in this section; the language is moved from existing section 2643.

Section 2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) - This amendment specifies that interstitial monitors must have third-party certification. This specification is made to clarify the fact that interstitial monitors are a type of qualitative release detection and to ensure compliance with standards set for other qualitative release detection methods.

Section 2645. Manual Tank Gauging and Testing for Small Tanks

(a) - This amendment is made to allow a 72-hour gauging period as indicated in Table 4.1. and to be consistent with EPA regulations.

(b) - The amendments to this subsection expand the manual tank gauging method to allow tanks between 1,001 and 2,000 gallons to be monitored without receiving a tank integrity test if the gauging period is 60 hours instead of the usual 48 hours. This change is made to allow tank owners another option for monitoring and to be consistent with EPA regulations.

(d)(1) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

(d)(3) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

Section 2646. Manual Inventory Reconciliation

(c)(1)(D) - The requirement to use a substance on a dipstick is modified to only require the use of the substance if the product-level readings on the dipstick are otherwise illegible. It was pointed out by some local agencies that use of these substances is not always necessary to obtain accurate readings.

(f) - The purpose of this amendment is to require the tank owner or operator to record the actions taken under subsection (e) which will be available to the LIA for review.

(i) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

Section 2646.1. Statistical Inventory Reconciliation

(a) - This amendment requires the tank owner to obtain approval from the LIA before statistical inventory reconciliation may be used as a monitoring method. Some tank owners have started using it without the knowledge of the LIA and some LIA's do not allow its use in their jurisdictions.

(b) - To avoid confusion regarding the differences between manual and statistical inventory reconciliation, language describing the daily measurement requirements for statistical inventory reconciliation is replaced with a reference to the identical requirements in the section on manual inventory reconciliation. There is no change in the proposed requirements.

(c) - The purpose of the proposed amendments is to clarify what monitoring information the tank owner or operator must supply to the SIR vendor. The proposed amendment also does not require the first three reports from the SIR vendor to meet the requirements. The SIR vendor needs a certain number of data points to perform SIR. The regulations allow the tank owner to provide the minimum number of data points by using previous months' data. Also, the proposed changes allow a three-month grace period to give the tank owner time to learn how to use SIR before the requirements pertaining to inconclusive results must be met.

(d)(4) - The requirements in this subdivision are reorganized for clarity and are made to allow more time to obtain a recalibration of the dispenser meter when necessary. The existing time allotment is insufficient to be able to schedule recalibration.

(e) -This amendment specifies that Article 5 must be complied with if a statistical inventory reconciliation report indicates a non-tight system and if the previous month's report was inconclusive or fail.

(f) - The addition of language in this subsection is for clarification only. The text implies that it is the owner or operator who reports a suspected release is the person who will conduct additional tests. This additional language makes this clear.

(h)- This amendment requires a piping tightness test or tank integrity test if a statistical inventory reconciliation report indicates inconclusive results or possible unauthorized releases. This clarification is necessary so that the correct portion of the UST system will be tested.

(j) - This amendment requires the owner or operator to report to the LIA annually, the result of statistical inventory reconciliation reports for the previous 12 months.

(k) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

ARTICLE 5. RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

Section 2650. Reporting and Recording Applicability

(d) - The word "record" was changed to "report" to account for a 1991 amendment in the UST law (AB 1954, Ch 1138), which added a new definition of unauthorized release under section 25295.5. Previously, the hazardous substance had to be stored in the tank and escape from the tank to be considered an unauthorized release. This amendment added spills or overfills that occur when a tank is being filled as a new type of unauthorized release. To be consistent with this statutory amendment, section 2650 must be changed to require release reporting, rather than recording.

(e)(1) - [redacted]

Section 2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(d) - Editorial changes are made for clarity; no new requirements are made.

(e) - This requirement was moved and combined with section 2655(e).

Section 2655. Free Product Removal Requirements

(e) - The amendment to this section requires the submittal of free product removal reports to the local agency within 45 days of confirmation of an unauthorized release. Existing language requires the report but does not specify that it must be submitted to the local agency. The local agency needs the reports to oversee cleanup. The timeframe of 45 days is proposed because this is ample time in which to compile a report and submit it to the local agency.

ARTICLE 6. UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products, technology, and procedures.

Section 2660. General Applicability of Article

(a) - This modification clarifies that any manufacturer specifications which exceed the requirements of this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) - This modification clarifies that repairs are made only following a release of product. (See also the definition of "repair.") Many activities which are considered repairs may in fact be preventive maintenance or "upgrades". Section 25296 of the H&SC places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) - This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) - This subsection is added to reference the new section which contains requirements for interior lining.

(e) - This subsection is added to reference the new section which contains requirements for bladder installation.

(f), (g), (h), and (i) - These subsections are moved from subsections (d), (e), (f), and (g) respectively. No substantive change.

(j) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) - A requirement is added that local agencies cannot approve repairs or upgrades if the tank is not sound and if the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of Federal Rule 40 CFR 281.32(d).

(l) - This language is moved from subsection 2661(f).

(m) - This language is moved from subsection 2661(g).

(n) - This language is moved from subsection 2661(j).

Section 2661. Requirements for Repairing Underground Storage Tanks

(a) - This subsection is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make the repair and place the tank back into operation without following up on cleaning up the release. Such action could be intentional or unintentional.

(b) - The first sentence in this subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) - This language is moved from subsection 2660(g) and reworded for clarity with no substantive change.

(d) - This language is moved from subsection 2661(i) with no substantive change.

(e) - This language is moved from subsection 2661(m) and reworded for clarity. In addition, language is added to comply with requirements in Federal Rule 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5.

(f) - This language is moved from subsection 2661(n) and reworded for clarity with no substantive change.

(g) - This language is moved from subsection 2661(p) with no substantive change.

Section 2662. Requirements for Upgrading Underground Storage Tanks

(a) - This subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d).

(b) - This subsection is moved from 2662(a).

(c)(1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection

method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) - This language is moved from subsection 2662(c) with no substantive change.

(e) - This language is moved from subsection 2662(b)(4).

Section 2663. Requirements for Interior Tank Lining

A new section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

(a) - This language is moved from 2661(a) with no substantive change. The prior subsection (a) is moved to a new section 2665.

(b) - This language is moved from subsection 2661(c) with no substantive change.

(c) - This language is moved from subsection 2661(d) with no substantive change.

(d) - This language is added for reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) - This language is moved from subsection 2661(h) with no substantive change.

(f) - This language is taken from section 2661(k) and reworded to reflect reorganization with no substantive change.

(g) - This language is moved from subsection 2661(n) with no substantive change.

(h) - This language is moved from subsections 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

Section 2664. Requirements for Using Bladder Systems

For clarification, the option to upgrade tanks using bladder systems has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(a) - Language is added in this subsection to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a ~~new requirement~~ change from the April amendments, but a clarification of ~~existing~~ the language in section 2662(d).

(b) - This requirement was moved from section 2662(d)(4) with no changes.

(c) - The requirement has been added to require cathodic protection for steel tanks with bladder systems and to comply with the federal upgrade requirements found in Federal Rule 40 CFR 280.21. If cathodic protection were not required, bladders would have to be removed to allow internal inspection at five or ten-year intervals. Pre-lining structural limiting criteria have been eliminated when the interior lining is capable of providing structural support.

(d) - This subsection is added to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language. where?

Section 2665. Requirements for Spill and Overfill Prevention Equipment

The requirements in this new section were moved from section 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under subsection 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements (see section 2635[b][3]).

Section 2666. Requirements for Upgrading Underground Piping

The language is moved from section 2664. The only substantive changes are in subsections (c) and (h).

(c) - This amendment requires that, not later than December 22, 1998, automatic line leak detectors must shut down the pump automatically if the leak detector fails or is disconnected. If the automatic line leak detector is disconnected intentionally or unintentionally or fails, then the piping could be operated without leak detection. To prevent this, the pump is wired into the leak detector which serves the purpose of requiring the leak detector to be fixed, and at the same time, not allowing the piping system to be used.

ARTICLE 7. CLOSURE REQUIREMENTS

Section 2670. General Applicability of Article

(f) - This amendment requires tank owners to obtain approval from the local agency for their temporary or permanent closure proposals. Existing language requires the submittal of the proposals, but not the prior approval. Prior approval is necessary to ensure that tank owners remove their tanks in accordance with state and local requirements. Also, local agencies are required to maintain tank closure information in their files. Without a record of closure approval, the files would be incomplete and out of compliance with federal requirements [40 CFR 280.74(c)].

(i) - "Decommissioned tanks" is added to this language to exempt such tanks which were taken out of service before January 1, 1984 from closure requirements. The definition of "decommissioned tanks" was included in the April 1993 proposed amendments; however, the term was inadvertently omitted from this section.

Section 2671. Temporary Closure Requirements

(b) - The requirement to continue corrosion monitoring is added because it is a federal requirement in Federal Rules 40 CFR 280.70(a) and 281.36.

(d) - This amendment adds the phrase, "over 12 months" to be consistent with federal regulations in 40 CFR 280.70 (c)

Section 2672. Permanent Closure Requirements

(c)(2) - Subsection (b)(2) requires tanks undergoing permanent closure to be inerted. The language is repeated in subsection (c) for tanks which are being closed in place rather than

removed. This addition was necessary in order to be consistent and to ensure that the regulations are no less stringent than federal regulations [40 cfr, 280.71(c) and 281.36(b).

ARTICLE 10. PERMIT APPLICATION, QUARTERLY REPORT, AND TRADE SECRET REQUIREMENTS

Section 2710. General Applicability of Article

(b) - The word "operator" is changed to "representative" because the owner is responsible for filing the UST permit application.

Section 2711. Information and Application for Permit to Operate and Underground Storage Tank

(a)(3) - This amendment requires the name, address and telephone number of the tank representative rather than the owner or operator to be included on a permit application. This change was made to be consistent with the language in section 2710(b).

Section 2712. Permit Conditions

(b) - The requirement that records of repairs and upgrades be maintained for the life of the UST is added to comply with Federal Rules 40 CFR 280.33(f) and 281.32(e).

(h) & (i) - Two subsections are added requiring the local agency to provide the permittee with a list of written permit conditions including a condition stating that the owner and operator are subject to all applicable provisions of the law and regulations and that the permit and conditions be maintained at the facility. These requirements are added to ensure that the permit serves as a communication link between the local agency, permittee (owner) and operator. The need for this requirement was identified during negotiations with EPA regarding program compliance monitoring procedures and during local agency office visits.

(j) - The requirement that all primary containment be product-tight is added to comply with Federal Rule 40 CFR 280.32, which requires that the UST be compatible with the substance stored. The Health and Safety Code definition of "product-tight" includes the concept of "compatibility". Previously, the requirement that the UST be product-tight was only in reference to new and upgraded tanks. This revision makes it clear that all USTs must comply with the product-tight requirement.

(k) - The requirement that owners and operators ensure that spills and overfills do not occur is moved from 2635(b)(3) and 2663(b) to comply with Federal Rule 40 CFR 280.30(a). This change clarifies that the requirement applies to all USTs, not just new or upgraded tanks.

Returned to Barbara 12/2/93 Dave

Arts 1,2,8,9,10

12/2/93

12/20

CALIFORNIA CODE OF REGULATIONS
TITLE 23, WATERS
DIVISION 3, WATER RESOURCES CONTROL BOARD
CHAPTER 16, UNDERGROUND STORAGE TANK REGULATIONS

FINAL STATEMENT OF REASONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). This chapter establishes requirements for the design, construction, installation, monitoring, testing, repair and upgrade, permitting and closure of USTs as well as release reporting, investigation, and initial abatement after USTs have unauthorized releases. Provisions in this chapter also prohibit anyone from owning or operating an UST without a permit issued to the owner by a designated local implementing agency (LIA). The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

UST regulations originally became effective in August 1985. Amendments were made and the existing version of the regulations was adopted on August 9, 1991. On April 2, 1993, the State Water Board proposed numerous amendments to existing regulations and began a 45-day comment period which ended on May 17, 1993. A public hearing was held on June 14, 1993, at which oral and written comments were received. Further amendments were made to the regulations as a result of comments received. Although many modifications were made, they were substantially related to the original proposals and a reasonable member of the directly affected public could expect that these types of changes could be made. A 15-day comment period began on September 17, 1993 and concluded on October 4, 1993. Editorial and nonsubstantive changes were made as a result of comments received during the 15-day comment period.

The proposed amendments to the UST regulations include editorial changes made for clarity and better organization as well as substantive changes which address how and when tanks are monitored, repaired, upgraded, or closed. There are significant changes in equipment requirements. None of these changes mandate prescriptive standards referenced in section 11346.14 of the Government Code.

The specific purpose and factual basis for each amendment is identified in section number order. In some cases, if a section or subsection has been renumbered, the existing section or subsection is identified so that the reader may compare existing language with proposed language.

ARTICLE 1. DEFINITION OF TERMS

Section 2610 - Definitions/Applicability of Definitions

This amendment removes the terms "hazardous substance," "operator," and "person" from the list of terms in section 2610 because the terms are being added to the list of definitions in section 2611.

Section 2611.

Bladder system - is added to describe a new method of upgrading an underground storage tank. The term is used in the language in Article 6, "Repair and Upgrade Requirements."

Compatible - is added using language in federal regulations. The term is used in the definition of membrane liner and without a definition, the meaning may not be clear.

Connected piping - is added using language in federal regulations. The term is used in the definition of "substantially beneath the surface of the ground" and without a definition, the meaning may not be clear.

Decommissioned tank - is added to describe an UST which is no longer in service and which has been rendered incapable of being put back into service. The term is used in Article 7.

Excavation zone - is added using language in federal regulations. The term is used in section 2641 and without a definition, the meaning may not be clear.

Existing underground storage tank - is modified to clarify which tanks are considered "existing tanks" and therefore subject to the requirements in Article 4 and all other applicable requirements. All USTs installed before January 1, 1984 are considered existing tanks, and with only one exception, all tanks installed on or after that date are not existing tanks (i.e., they are "new" tanks, see below.) The exception is for motor vehicle fuel tanks over 1,100 gallons located at a farm and used for agricultural purposes. These tanks were not regulated until January 1, 1987. So, such tanks installed between January 1, 1984 and January 1, 1987 are also considered existing tanks. The previously proposed language was vague as to this exception.

Farm tank - is modified for clarity. Existing language can be interpreted two ways. It could be describing a combination of tanks which, together, hold no more than 1,100 gallons or it could be describing a combination of tanks which, individually, hold no more than 1,100 gallons. For some owners of farm tanks, the distinction is significant

and means the difference between having regulated or unregulated tanks.

Free product - is added using language in federal regulations. The term is used in Article 6, and without a definition, the meaning may not be clear.

Hazardous substance - The definition of "hazardous substance" is in section 25281(f) H&SC. This definition states that a substance is hazardous when it meets both the criteria in subsections (1) and (2). A definition is added to the regulations to clarify the intent of the statute: a substance is hazardous when it meets either of the criteria in subsections (1) or (2) of section 25281(f) H&SC.

Hydraulic lift tank - is reworded to agree with the federal definition.

Inconclusive - is added because that term is used in Article 4 to define the possible results of statistical inventory reconciliation.

Leak threshold - The definition of "leak threshold" is added to describe a value against which test measurements are compared during a tank or pipeline test. The term is used in new language in section 2643(b) to identify requirements for automatic tank gauging systems installed after 1995.

A tank or pipeline test method which has been evaluated by a third party according to EPA protocol to meet a certain performance standard within a specified range of probability of detection and probability of false alarm would have a leak threshold which is smaller than the specified performance standard. For example, the performance standard of 0.1 gallons per hour (gph) with at least a 95% probability of detection and not more than a 5% probability of false alarm would have a leak threshold which ~~is generally~~ must be smaller than 0.1 gph (~~i.e.,~~ usually 0.05 gph). The 0.1 gph is the performance standard leak rate and the 0.05 gph is the leak threshold. Therefore, if a measured leak rate for a tank or piping during a tightness test exceeds the 0.05 gph value, there is at least 95 percent chance that the tank or piping is leaking at 0.1 gph or higher.

Leak threshold, however, is not an allowable leak rate. Leak threshold is a number, used to determine the leak detection ability of the test method. All leaking tanks need to be fixed regardless of the rate of the leak.

Maintenance - is added using language in federal regulations. The term is used throughout the text of the regulations and without a definition as it applies to USTs, the meaning may not be clear.

Manual inventory reconciliation (MIR) - is added to distinguish this inventory monitoring method from a newly approved monitoring method called "statistical inventory reconciliation" (SIR). Existing language refers simply to "inventory

reconciliation" without modifying the term. Both manual and statistical inventory reconciliation are covered in Article 4.

New underground storage tank - Regulations in this chapter refer to tanks as "new" or "existing." This definition is modified to make clear that the terms "new" and "existing" USTs are mutually exclusive and all encompassing of the regulated universe of tanks. This modification is made in response to concerns expressed by EPA that the previous language could be construed as to leave a void between the two definitions and consequently allow some tanks which should be subject to new requirements comply with only the existing tank requirements.

Existing language contains amendment dates which are confusing and unnecessary therefore they are removed.

Existing language has also caused confusion because it implies that in order to be considered "new," a tank must be installed under permit from a local agency. New tanks include those installed without a permit; therefore, the reference to a permit is removed.

Operational life - is added using language in federal regulations. The term is used in Article 6 to refer to a tank's useable life. Without a definition, the meaning may not be clear.

Operator - The definition of "operator" is added to clarify the statutory definition in section 25281(h) H&SC which defines "operator" as a person who has "**... daily responsibility** for, the **daily operation** of an underground storage tank system" (emphasis added). This definition has caused confusion about who is considered the operator of a tank. For example, by saying that the operator has "daily responsibility," it is implied that a gas station attendant, who is daily responsible for what happens at the station, is the operator. This is not the intent of federal regulations or state statutes. Removing the reference to "daily responsibility" and saying instead, "responsibility for the daily operation" clarifies federal and state intent and makes the definition consistent with language in section 25299.19 of Chapter 6.75 H&SC (Petroleum Underground Storage Tank Cleanup regulations) and 40 CFR 280.12.

Person - is added to make clear that all entities regulated under federal law are also regulated under California law. This change is made in response to EPA concerns expressed during review of the California UST program pursuant to Federal Rule 40 CFR 281 that the statutory definition does not specifically name the same set of regulated entities.

The definition of "person" in section 25281(j) H&SC does not specifically include "consortium," "joint venture," and "commercial entity," which are included in the definition in section 9001(6) of RCRA (42 USC section 6901 et seq.) In addition, the

definition could be interpreted to include only certain political subdivisions of California and not the following entities that are specifically included under section 1004(15) of RCRA: any interstate body, all municipalities, commissions, and political subdivisions of California, other states and the political subdivisions of these states. The definition of "person" in section 25281(j) was legislatively intended to mirror the definition of "person" in RCRA. The proposed definition of "person" in this section clarifies federal and legislative intent without quoting the language in RCRA.

Release detection method - is modified at the request of EPA to include "release detection system" because that term is used in the text of the regulations.

Repair - is added because the term is used extensively in the text of the regulations. Provisions of Article 6 differentiate between repairs and upgrades and without a definition, the requirements for each may be understood.

Statistical inventory reconciliation (SIR) - This is a new definition. See statement of reasons in this section for "manual inventory reconciliation."

Statistical inventory reconciliation provider - is added because the term is used in the proposed text which may not be clear without a definition.

Storm water or wastewater collection system - is added using language in federal regulations. These terms are using in existing language in section 2621, and without a definition, their meaning may not be clear.

Upgrade - is added because it is used in Article 6 to describe what tank owners are required to do to their tanks by December 22, 1998. Without a definition, the meaning of "upgrade" may not be clear.

Wastewater treatment tank - A definition of wastewater treatment tank is necessary in these regulations because it is listed under exemptions in section 2621. However, the current definition states that a wastewater treatment tank is an "underground storage tank..." By definition, an underground storage tank is one which is regulated. Therefore, the reference to underground storage tank is incorrect and is removed. The modification to this definition is made in response to an EPA suggestion, and is intended to ensure that the California program is no less broad in scope that the federal program. See 40 CFR 280.10(b)(2) and (d)(1) and 280.12.

This amendment clarifies the definition of a wastewater treatment tank to make it consistent with the definition in section 13625 of the Water Code.

Section 2620.

The word "standard" is changed to "requirement" throughout this article because "standard" does not accurately describe the purpose of a regulation.. A standard is a measurement of comparison; a requirement is a prerequisite. These regulations are prerequisites for tank owners and operators.

(d) This subsection provides an overview of applicability of each article. The reference to Article 11 is added to being this section up to date. Article 11 was added during the 1991 rulemaking, but section 2620(d) was not updated at that time.

Section 2621.

(a) The universe of underground storage tanks covered under state law differs, in some cases, from those covered under federal law. The proposed amendment prevents state regulations from inadvertently exempting tanks regulated by federal regulations. This modification clarifies that the listed tanks are not exempt from California rules if subject to federal regulation.

(a)(3) The exemption for tanks in vaults or basements has been moved to (a)(15). The exemption for hydraulic lift tanks is modified to include all such tanks and not only those with a capacity of under 110 gallons as specified in existing regulations.

The decision to exempt hydraulic lift tanks is based on the following:

1. They are not used for storage as that term is used in the definition of "underground storage tank" and therefore, do not fit the definition.

2. The threat to human health and the environment is minimal because the tanks contain small amounts of regulated substances. The risk of contamination is relatively low in comparison USTs which store large quantities of hazardous substances.

3. They are self-monitoring. When a leak occurs, the machinery ~~they~~ keep support ceases to operate properly.

4. The cost impact in regulating these tanks would be severe for both the owners and the LIAs. Owners would need to retrofit existing tanks which may be located underground under large buildings. The tanks

would need to be monitored using some method other than those used for USTs because current monitoring methods are not practical for hydraulic lift tanks. The potentially overwhelming large number of tanks would require considerable effort on the part of LIAs, with little discernable environmental benefit. Regulation of these tanks would divert agency resources from other, more serious health threats.

(a)(9) This amendment specifies that pipelines connected to regulated tanks which are located in refineries or oil fields are not exempt from regulation.

Existing language exempts pipelines located in refineries or oil fields. The intent was to exempt large pipelines used in the operation of the refineries or oil fields. It was never intended to exempt pipelines connected to regulated tanks.

(a)(10) This subdivision has been reworded to conform to language in Title 42 of the U.S. Code.

(a)(11) The exemption for radioactive materials tanks has been modified to match the federal exemption. This change is made to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(c)(2).

(a)(14) This amendment changes a reference from Department of Health Services (DHS) to Department of Toxic Substances Control (DTSC). The responsibility for issuing hazardous waste facilities permits was transferred from DHS to DTSC on July 17, 1991.

(a)(15) The exemption for tanks located in vaults is moved from subdivision (a)(3).

(a)(16) The exemption for structures exempted by section 25281(x) H&SC is moved from subdivision (a)(15).

(c) This section is modified to require that a permit be obtained prior to a change in use that causes a previously exempt tank to become regulated. The previous requirement was to obtain a permit within 120 days following such change in use. This modification is in response to EPA concerns that the previous language provided a grace period to such tanks, which is less stringent than the federal requirements.

(c)(2) This subdivision is deleted to clarify existing language.

Existing language in this section requires exempt tanks to be closed in accordance with requirements for regulated tanks. A legislative counsel opinion dated August 26, 1991, indicates that this was not the legislative intent and that when the owner of an exempt tank as defined in section 25281(x)(2) H&SC, abandons the tank, the owner should not be required to comply with Chapter 6.7 H&SC. An exempt tank does not fall within the definition of an underground storage tank in section 25281 H&SC and its status as an exempt tank should not change upon discontinuance of use.

ARTICLE 8. SITE-SPECIFIC VARIANCE PROCEDURES

Section 2680

(a) and (b) Reference to categorical variances is deleted in subsection (a) and (b). Assembly Bill 1731 (Sher), statutes of 1991, amends sections 25299.2 and 25299.4 H&SC to delete the provision allowing categorical variances from construction and monitoring requirements. The legislature determined that his provision had never been used and therefore was not needed.

Existing Section 2681

The entire section regarding categorical variances is deleted for the reasons stated in the Factual Basis for section 2680 above. Existing section 2682 will be renumbered to 2681.

New Section 2681 - Site-Specific Variances

(c)(7) - This amendment would allow local agencies to set fees (up to maximum amounts set by existing regulations) for variance requests. Existing language requires local agencies to charge exact ~~fees of~~ $2,750 for a variance application at one site and $5,500 for a variance application for more than one site. In some cases, local agencies may be able to process variance request applications for less that the amount prescribed by this regulation.

ARTICLE 9. LOCAL AGENCY REQUESTS FOR ADDITIONAL DESIGN AND CONSTRUCTION STANDARDS

Amendments made in Article 9 are editorial only.

ARTICLE 10. PERMIT APPLICATION, QUARTERLY REPORT, AND TRADE SECRET REQUIREMENTS

Section 2710.

(b) "Representative" is added because a person other than the owner can be responsible for filing the UST permit application.

Section 2712.

(b) The requirement that records of repairs and upgrades be maintained for the life of the UST is added to comply with Federal Rules 40 CFR 280.33(f) and 281.32(e). The requirements for cathodic protection and written performance claims are added to comply with Federal Rules 40 CFR 280.31(d)(1) and 280.45(a), respectively.

(c) The permit expiration date is added to indicate when a permit will need renewal. Articles 3 and 4 currently specify that monitoring requirements be included in a permit. For emphasis and clarity, this requirement is included here as well.

(h) and (i) Two subsections are added requiring the LIA to provide the permittee with a list of written permit conditions including a condition stating that the owner and operator are subject to all applicable provisions of the law and regulations and that the permit and conditions be maintained at the facility. These requirements are added to ensure that the permit serves as a communication link between the LIA, permittee (owner) and operator. The need for this requirement was identified during negotiations with EPA regarding program compliance monitoring procedures and during LIA office visits.

(j) The requirement that all primary containment be product-tight is added to comply with 40 CFR 280.32, which requires that the UST be compatible with the substance stored. The H&SC definition of "product-tight" includes the concept of "compatibility". Previously, the requirement that the UST be product-tight was only in reference to new and upgraded tanks. This revision makes it clear that all USTs must comply with the product-tight requirement.

(k) The requirement that owners and operators ensure that spills and overfills do not occur is moved from section 2635(b)(3) and 2663(b) to comply with 40

CFR 280.30(a). This change makes it clear that the requirement applies to all USTs, not just to new or upgraded tanks.

Section 2713

(b) This amendment requires local agencies to transmit unauthorized release update information to the appropriate Regional Water Board on a quarterly basis.

This is not a new requirement. It clarifies the intent of 2713(b). Because the Leaking Underground Storage Tank Information System (LUSTIS) report is updated quarterly, local agencies should update Regional Water Boards on a quarterly basis. Updated information from local agencies can be readily included in quarterly updates of LUSTIS reports, if necessary.

(c) This subsection is added to establish authority to require each local agency to transmit an Underground Storage Tank Program Implementation Report to the State Water Board on a quarterly schedule.

Section 25299.7 of the H&SC states that the State Water Board may prepare any procedures and implementation plans necessary to assure compliance with requirements for a state program implementing the federal act. These procedures and implementation plans may include plans with respect to investigation, compliance monitoring, enforcement, public participation and sharing of information among local agencies, the State Water Board and EPA. The Quarterly Underground Storage Tank Implementation Program Report is part of the State Program ~~Approval.~~ necessary to implement the Federal act.

Article 11. Corrective Action Requirements

No amendments made to this article.

Barbara,
We need to keep the 3 SOR for each notice so we will know why we made the changes. OAL can get the combined FSOR
10/29
Dave

FINAL STATEMENT OF REASONS FOR CHANGES MADE AFTER THE 15-DAY COMMENT PERIOD ENDING OCTOBER 4, 1993

INSERT

Section 2611. Additional Definitions

(1) "tank" is amended to add "wastewater treatment"

~~The words~~ "wastewater treatment" ~~have been added~~ between "private" and "facility" in the definition of "wastewater treatment tank." This clarifies that the reference to a "private facility" is meant to apply only to a private "wastewater treatment" facility. This change is made in response to a US EPA suggestion, and is intended to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(b)(2) & (d)(1) and 280.12.

Section 2621. Exemptions to the Regulations

(2) (a)(11) The exemption for radioactive materials tanks has been modified to match the federal exemption. This change is made to ensure that the California program is no less broad in scope than the federal program. See 40 CFR 280.10(c)(2).

(3) (c) This section is modified to require that a permit be obtained prior to a change in use that causes a previously exempt tank to become regulated. The previous requirement was to obtain a permit within 120 days following such change in use. This modification is in response to US EPA concerns that the previous language provided a grace period to such tanks, which is less stringent than the federal requirements.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

Not needed for the final SOR

(e) This section is modified for clarity. The phrase, "cease the implementation process . . ." is deleted because it does not help resolve the problems which need addressing with an unauthorized release is discovered.

The phrase, "the owner or operator is added to clarify who is responsible to comply with the requirement.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

Not needed

(a) and (e) Secondary containment is not required for new piping regardless of the type of hazardous substance stored if the piping is described as in subsections (a)(1) through (a)(3).

The EPA OUST office in Washington DC provided an interpretation of the federal requirements via the OUST office in Region 9 on October 6, 1993. The interpretation states that European-style suction piping is intrinsically safe and, therefore, does not need secondary containment even though it is new and may contain non-petroleum hazardous substances. EPA considers single-walled European-style suction piping to be equivalent to secondary containment.

EPA does not require secondary containment for new piping described as follows regardless of the type of hazardous substance stored:

1) Vent or tank riser piping, provided that the primary containment has overfill protection equipment capable of restricting or shutting off flow to the tank at or before 95% capacity.
2) Vapor recovery piping if designed so that it cannot contain liquid-phase product.

EPA does not require secondary containment (or leak detection or upgrading) for piping that does not routinely contain hazardous substances. Piping as described in items 1) and 2) above does not routinely contain hazardous substances. For example, a newly-installed waste oil tank with gravity flow input piping would require secondary containment of the tank but not for the piping if the below-grade piping is sloped so that the entire contents of the piping automatically drains back to the tank and if one of the following is applicable:

1) the UST system is equipped with overfill prevention equipment capable of restricting or shutting off delivery to the tank at or before 95% capacity.

2) The tank inlet exists in an observable area, the spill container is adequate to collect any overfill, and the tank system is filled by transfers of no more than 25 gallons at one time.

In the above scenario, the single-walled input piping must have corrosion protection and be monitored once every two years. Monitoring is waived for vertical drops. Monitoring at a pressure designated by the test equipment manufacturer must be capable of detecting a minimum release equivalent 0.1 gph defined at 40 psi. If the piping cannot be isolated from the tank for testing purposes, the piping must be tested once using the same standards applicable to an overfilled volumetric tank integrity test.

These requirements are being implemented to be consistent with federal requirements.

Section 2641. Monitoring Program Requirements

(k) The term, "cease the installation process" is relocated for clarity. (from where to where?)

Section 2643. Non-Visual Monitoring/Quantitative Release Detection Methods

(d) and (e) These subsections are amended to allow other equivalent test methods for situations where piping cannot be tested otherwise without a great deal of expense.

Section 2646.1. Statistical Inventory Reconciliation

(b) the phrase "...except for subsection (c)(1)(G) of that section" is deleted. There was no valid reason to make an exception for SIR because the data gathering for SIR is the same as for MIR. Dave - you didn't say what the change was.

Section 2650. Reporting and Recording Applicability

(e) The requirement to "record" the conditions specified in Section 2650(e) is added in response to US EPA comments. The rationale for the comment is that certain conditions listed in this section (e.g., monitoring results) must be entered in the facility records. This change clarifies that the reporting of such conditions does not eliminate the need to keep records. See 40 CFR 280.34(b).

Section 2663. Interior Tank Lining Requirements

(a) The word, "~~repaired~~ relined" is replaced with "repaired a second time with the interior lining method". This change is made to be consistent with Chapter 6.7, section 25296 H&SC.

Section 2666. Requirements for Upgrading Underground Piping

(c) This amendment (what amendment) was made to make the regulation ~~no less stringent than the federal regulation (40 CFR~~ to not require emergency generators to shut down would be for these systems but still require that there be an alarm should the system leak.

Section 2670. General Applicability of Article

(f) The language ". . . for such shorter period of time as may be approved. . ." is changed to ". . . "within a shorter period of time approved. . ." for clarification as suggested by US EPA.

(i) Language has been added to clarify that decommissioned tanks must be properly closed when the local agency so directs. This is added to meet the requirement of 40 CFR 281.36(c).

Section 2671. Temporary Closure Requirements

(a)(1) This amendment (what amendment) was made to require compliance with only the applicable provision in the referenced chapters.

(e) The applicable requirements from 281.36(a)(1) relating to temporarily-closed USTs have been added as 2671(e). This is in response to US EPA comments, and to ensure that the California requirements are no less stringent than federal requirements.

10/5/93

FINAL STATEMENT OF REASONS

UNDERGROUND STORAGE TANK REGULATIONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). This chapter establishes requirements for the design, construction, installation, monitoring, testing, repair and upgrade, permitting and closure of USTs as well as release reporting, investigation, and initial abatement after unauthorized releases from USTs. The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

UST regulations originally became effective in August 1985. Amendments were made and the existing version of the regulations was adopted on August 9, 1991. On April 2, 1993, the State Water Board proposed numerous amendments to existing regulations and began a 45-day comment period which ended on May 17, 1993. A public hearing was held on June 14, 1993, at which oral and written comments were received. A summary of those comments and the State Water Board's responses are included in the Final Statement of Reasons.

Although many modifications have been made, they are substantially related to the original proposals and a reasonable member of the directly affected public could expect that these types of changes could be made.

The proposed changes do not mandate prescriptive standards referenced in section 11346.14 of the Government Code. The specific purpose of each proposed change is explained as well as the necessity for the change. Grammatical and editorial changes are not itemized here, but are identified by underline and strikeout in the modified text.

This Final Statement of Reasons includes only those amendments made to the originally proposed text noticed on April 2, 1993.

ARTICLE 1. DEFINITION OF TERMS

Section 2611. Additional Definitions

"Bladder system" is modified to include rigid material because these systems can be constructed of both types of material.

"Compatible" is added using language in federal regulations. The term is used in the definition of membrane liner and without a definition the meaning may not be clear.

"Connected piping" is added using language in federal regulations. The term is used in the definition of "substantially beneath the surface of the ground" and without a definition, the meaning may not be clear.

"Excavation zone" is added using language in federal regulations. The term is used in section 2641 and without a definition, the meaning may not be clear.

"Existing underground storage tank" - This definition is modified to clarify which tanks are considered "existing tanks" and therefore subject to the requirements in Article 4 and all other applicable requirements. All USTs installed before 1/1/84 are considered existing tanks, and with only one exception, all tanks installed on or after that date are <u>not</u> existing tanks (i.e.,

they are "new" tanks, see below.) The exception is for motor vehicle fuel tanks over 1,100 gallons located at a farm and used for agricultural purposes. These tanks were not regulated until 1/1/87. So, such tanks installed between 1/1/84 and 1/1/87 are also considered existing tanks. The previously proposed language was vague as to this exception.

"Farm tank" is modified for clarity. Existing language can be interpreted two ways. It could be describing a combination of tanks which, together, hold no more than 1,100 gallons or it could be describing a combination of tanks which, individually, hold no more than 1,100 gallons. For some owners of farm tanks, the distinction is significant and means the difference between having regulated or unregulated tanks.

"Free product" is added using language in federal regulations. The term is used in Article 6, and without a definition, the meaning may not be clear.

"Hydraulic lift tank" was deleted from the regulations in the original proposals because the State Water Board intended to remove these tanks from the list of exempted tanks in section 2621. Because the decision has been made to include hydraulic lift tanks in the list of exemptions, the definition is reworded to agree with the federal definition and is reinstated.

"Inconclusive" is added because that term is used in the text to define results of statistical inventory reconciliation.

"Leak threshold" is amended to clarify the fact that it is not an allowable leak rate. Leak threshold is a number used to determine the leak detection ability of the test method. All leaking tanks need to be fixed regardless of the rate of the leak.

"Maintenance" is added using language in federal regulations. The term is used throughout the text of the regulations and without a definition as it applies to underground storage tanks, the meaning may not be clear.

"Manual inventory reconciliation" is modified to reflect the fact that it is used for determining if a leak has occurred and not only for investigating product loss.

"New underground storage tank" is modified to make clear that the terms "new" and "existing underground storage tank" are mutually exclusive and all encompassing of the regulated universe of tanks. This modification is made in response to concerns expressed by US EPA that the previous language could be construed as to leave a void between the two definitions and consequently allow some tanks which should be subject to new requirements comply with only the existing tank requirements.

"Operational life" is added using language in federal regulations. The term is used in Article 6 to refer to a tank's useable life. Without a definition, the meaning may not be clear.

"Person" is modified to make clear that all entities regulated under federal law are also regulated under California law. This change is made in response to US EPA concerns expressed during review of the California UST program pursuant to Federal Rule 40 CFR 281 that the statutory definition does not specifically name the same set of regulated entities.

"Release detection method" is modified at the request of EPA to include "release detection system" because that term is used in the text of the regulations.

"Repair" is added because the term is used extensively in the regulations. Provisions of Article 6 differentiate between repairs and upgrades and without a definition, the requirements for each may be misunderstood.

"Statistical inventory reconciliation" is amended for clarity.

"Statistical inventory reconciliation provider" is added because the term is used in the proposed text which may not be clear without a definition.

"Storm water or wastewater collection system" is added using language in federal regulations. These terms are used in existing language in section 2621, and without a definition, their meaning may not be clear.

"Upgrade" is added to the definitions because it is used in Article 6 to describe what tank owners are required to do to their tanks by December 22, 1998. Without a definition, the meaning of "upgrade" may be unclear.

ARTICLE 2. GENERAL PROVISIONS

Section 2620. General Intent, Content, Applicability, and Implementation of Regulations

In addition to editorial changes in subsections (b) and (d), the following modification is made to this section:

(d) - This subsection provides an overview of applicability of each article. The reference to Article 11 is added to bring this section up to date. Article 11 was added during the 1991 rulemaking, but section 2620(d) was not updated at that time.

Section 2621. Exemptions from the Regulations

In addition to a change for clarity in subsection (a)(13) and renumbering subsections (a)(15) and (a)(16), the following modifications are made:

(a) - This modification clarifies that the listed tanks are not exempt from California rules if subject to federal regulation.

(a)(3) The exemption for tanks in vaults or basements has been moved to (a)(15) so that the hydraulic lift tank exemption could be returned to its location before the proposed amendments were made. The exemption for hydraulic lift tanks is modified to include all such tanks and not only those with a capacity of under 110 gallons as specified in existing regulations.

Several commenters addressed the proposed amendment to section 2621(a)(3) which would have resulted in the regulation of all hydraulic lift tanks in California. The State Water Board has made the decision to modify this section to exempt all hydraulic lift tanks from regulation.

The decision to exempt hydraulic lift tanks is based on the following:

- They are not used for storage as that term is used in the definition of "underground storage tank" and therefore, do not fit the definition.

- The threat to human health and the environment is minimal because the tanks contain small amounts of regulated substances. The risk of contamination is relatively low in comparison to underground storage tanks which store large quantities of hazardous substances.

- They are self-monitoring. When a leak occurs, the machinery they support ceases to operate.

- The cost impact in regulating these tanks would be severe for both the owners and the implementing agencies. Owners would need to retrofit existing tanks which may be located underground under large buildings. The tanks would need to be monitored using some method other that those used for underground storage tanks because current monitoring methods are not practical for hydraulic lift tanks. The potentially overwhelmingly large number of tanks would require considerable effort on the part of implementing agencies, with little discernable environmental benefit. Regulation of these tanks would divert agency resources from other, more serious health threats.

(a)(15) - The exemption for tanks located in vaults or basements is moved from subdivision (3).

(a)(16) - The exemption for structures exempted by section 25281(x) H&SC is moved from subdivision (15).

ARTICLE 3. NEW UNDERGROUND STORAGE TANK DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS

Section 2630. General Applicability of Article

(a) - The purpose of this paragraph is to accommodate cases where tanks were installed after the effective date of the overall UST regulatory program (1/1/84), but before later, more stringent requirements were added by statutory revision. The new language eliminates the unnecessary reference to the effective date of the regulations.

Section 2631. Design and Construction Requirements for New Underground Storage Tanks

(c) - Language is added to this section to clarify that striker plates attached to the bottom of drop tubes satisfies the equirement to have a striker plate in all USTs. Normally, striker plates are affixed to the bottom of a tank. At least one manufacturer has developed a plate which can be attached to the drop tube and provides the same protection as striker plates which meet the specifications of section 2631(c). Allowing the use of this new technology is environmentally safe and provides tank owners with an option which is less expensive than empting and retrofitting a tank with a striker plate.

(d)(9) - This paragraph is added to meet the requirements of the federal program, as specified in Federal Rule 40 CFR 280.43, pertaining to UST systems using excavation barriers as a means of providing secondary containment. A requirement is added to ensure that secondary containment is above the ground water and not in a 25-year flood plain unless the containment and monitoring designs are for use under these conditions. The purpose is to prevent the secondary containment from being flooded.

(h) - The language added in the April proposed amendments is removed because the change is not necessary to be no less stringent than EPA requirements as originally thought.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(c)(1)(D) - This subdivision is amended to require analysis of liquid around a tank only if necessary to determine if there has been an unauthorized release and only if the method of analysis is approved by the local agency. There are occasions when it is unnecessary to go to the expense of analyzing liquid in order to know if there has been an unauthorized release (e.g., visible leaks). Requiring approval of the local agency to use a specific method of field analysis will allow the local agency to authorize the use of methods that will work for site-specific cases.

(c)(2)(A) - This amendment specifies that continuous monitoring systems myst meet the specifications of section 2643(f). Without this specificity, this language may be incorrectly interpreted to allow monitoring systems not meeting the requirements of section 2643(f) to be used.

(d)(1)(B) and (C) - Requirements are added to include the name and model number of monitoring equipment and a plot plan in monitoring program written procedures. This specificity is necessary in order for local agencies to identify monitoring equipment used by owners and operators and to identify exact locations where monitoring is conducted.

(d)(2) - Language is added to allow the LIA to approve a longer period of time in which an owner must prepare a response plan. Some tank owners may beve valid reasons for needing more than 30 days to prepare such plans.

(e) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2633. Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

(d) - The requirement that the owner or operator demonstrate that the leak interception and detection system is capable of detecting a release before it escapes into the environment pertains to monitoring requirements for the system, as opposed to design and construction requirements, and is, accordingly, moved to Section 2634(d).

Section 2634. Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

(d) - Language in this subsection is moved from 2633(d). There is no change in requirements.

(d)(1)(B) - The proposed language requiring the demonstration of efficiency of a manual monitoring system has been deleted because it duplicates a requirement previously located in 2633(d) and now found in 2634(d).

Section 2635. Installation and Testing Requirements for All New Underground Storage Tanks

(a)(2)(A) - This amendment changes the requirement for cathodic protection systems to be tested under the direction of a cathodic protection tester to a requirement that they be tested

by such a tester because Federal Rule 40 CFR 280.31 (b) of the federal regulations require the inspection.

(a)(5) - This amendment clarifies that interstitial monitors must either have third-party certification or be approved by the State Water Board. Because this is a monitoring device, it is required by EPA's regulations to have a third-party certification. The amendment also specifies that a tank test is not required if the tank is tested by another means deemed by the State Water Board to be equivalent to a tank integrity test.

(b)(2)(D) - The purpose of this amendment is to add a new alternative in satisfying the overfill prevention requirement. US EPA amended its "spill and overfill prevention" requirements (40 CFR 280.20c) on April 1990 to allow additional means to satisfy the requirement. The proposed amendment makes state regulations more consistent with federal requirements.

(b)(3)(proposed) - Federal Rule 40 CFR 280.30(a) requires owners and operators to ensure that spills and overfills do not occur. This language is moved to 2712(k) to clarify that it applies to all USTs, not just new tanks.

(b)(3)(modified) - The conditions under which a local agency may waive the overfill prevention requirements have been modified to comply with Federal Rule 40 CFR 280.20(c)(2)(ii). The requirements can only be waived when inputs to the tank do not exceed 25 gallons at any one time.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a)(1), (2) & (3) - These sections are reorganized and reworded to clarify circumstances under which exceptions may be made to the secondary containment requirement for piping. There is no change in requirements.

(a)(3)(C) - This amendment specifies that only one check valve may be located directly below and as close as practical to the suction pump. The modification was made to ensure that state regulations are no less stringent than federal regulations [(40 CFR 280.41(b)(2)].

(b) - The provisions of this subsection are moved to section 2636(a) for better organization.

(f)(1) - This amendment specifies that continuous monitoring systems must meet the specification of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

ARTICLE 4. EXISTING UNDERGROUND STORAGE TANK MONITORING REQUIREMENTS

Section 2640. General Applicability of Article

(d) - A new subsection is added to clarify the applicability of the farm tank monitoring option available under H&SC section 25292(b)(5)(A). That option allows farm tanks between 1,100 and 5,000 gallons to be monitored using monthly tank gauging and triennial tank testing. Federal Rule 40 CFR 280.43(b) specifies that weekly manual tank gauging can only be used on tanks up to 2,000 gallons, and that for tanks greater than 550 gallons, tank testing must be performed at least annually. Without the change, the state program would be less stringent than the federal program for this line item.

Section 2641. Monitoring Program Requirements

(a) - The proposed language regarding the farm tank monitoring option has been moved to 2640(d) and modified to reflect federal rules. Authorization is given to local agencies to reduce frequency of monitoring when environmental conditions make it impractical, physically impossible, or life threatening to conduct the monitoring. This authorization was in the 1985 version of the regulations and was omitted in error in 1991.

(i) - Existing language requires owners or operators to obtain prompt approval for their monitoring programs. "Prompt" is subjective; therefore, reference to the word is removed. The requirement to obtain local agency approval for the replacement, repair, upgrade, or closure of a tank is consistent with other regulations in this chapter.

(k) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2643. Non-Visual Monitoring/Qualitative Release Detection Methods

This section has undergone several changes and reorganization as a result of comments made by several people during the 45-day public comment period.

(b) - This subsection has requirements for 1) monthly tank monitoring for methods suh as automatic tank gauges and, 2) monitoring programs consisting of annyal tank testing and monthly inventory reconciliation. This subsection has been expanded to include more specific monitoring options as follows:

1) Automatic tank gauging is the same as (1) above except it is done after product delivery or when the tank is filled to within 10 percent of the highest operating level. The reason the tank owner is allowed todo the test within 10 percent of the highest operating level is to provide time for the tank product to stabilize efore the test. Product dispensing can take place during this period without interfering with test accuracy.

2) Automatic tank gauging (ATG) and manual inventory recondiliation (MIR) together is a new monitoring option. MIR is required because the ATG can be performed when the level is only three feet, thus providing backup monitoring.

3) Statistical inventory reconciliation and tank testing together are a new monitoring option which is allowed because SIR and tank test methods must receive third-party evaluations for compliance with federal requirements. The specifics on SIR and tank testing are given in sections 2646.1 and 2643.1, respectively.

4) MIR and tank testing replaces 2) above. MIR is covered in secion 2645 and tank testing is covered in section 2643.1. This is not a new monitoring option, but has been moved and reqorded for better comprehension and organization.

5) Other test methods may be approved if they comply with section 2643(f), which requires all methods to receive third-party evluations. The purpose of adding this option is to ensure that as technology advances, new and improved testing methods may be considered for use by tank owners.

(c) - [redacted]

(d) and (e) - Language is added to allow LIAs to approve a substitute test for piping which cannot be isolated for testing purposes. Without this alternative, there would be no way to test this piping.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

For easier comprehension and better organization, this section brings together the requirements applicable to both volumetric and nonvolumetric tank integrity tests. There are no new requirements in this section; the language is moved from sexisting section 2643.

Section 2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) - This amendment specifies that interstitial monitors must have third-party certification. This specification is made to clarify the fact that interstitial monitors are a type of qualitative release detection and to ensure compliance with standards set for other qualitative release detection methods.

Section 2645. Manual Tank Gauging and Testing for Small Tanks

(a) - This amendment is made to allow a 72-hour gauging period as indicated in Table 4.1. and to be consistent with EPA regulations.

(b) - The amendments to this subsection expand the manual tank gauging method to allow tanks between 1,001 and 2,000 gallons to be monitored without receiving a tank integrity test if the gauging period is 60 hours instead of the usual 48 hours. This change is made to allow tank owners another option for monitoring and to be consistent with EPA regulations.

(d)(1) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

(d)(3) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

Section 2646. Manual Inventory Reconciliation

(c)(1)(D) - The requirement to use a substance on a dipstick is modified to only require the use of the substance if the product-level readings on the dipstick are otherwise illegible. It was pointed out by some local agencies that use of these substances is not always necessary to obtain accurate readings.

(f) - The purpose of this amendment is to require the tank owner or operator to record the actions taken under subsection (e) which will be available to the LIA for review.

(i) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

Section 2646.1. Statistical Inventory Reconciliation

(a) - This amendment requires the tank owner to obtain approval from the LIA before statistical inventory reconciliation may be used as a monitoring method. Some tank owners have started using it without the knowledge of the LIA and some LIA's do not allow its use in their jurisdictions.

(b) - To avoid confusion regarding the differences between manual and statistical inventory reconciliation, language describing the daily measurement requirements for statistical inventory reconciliation is replaced with a reference to the identical requirements in the section on manual inventory reconciliation. There is no change in the proposed requirements.

(c) - The purpose of the proposed amendments is to clarify what monitoring information the tank owner or operator must supply to the SIR vendor. The proposed amendment also does not require the first three reports from the SIR vendor to meet the requirements. The SIR vendor needs a certain number of data points to perform SIR. The regulations allow the tank owner to provide the minimum number of data points by using previous months' data. Also, the proposed changes allow a three-month grace period to give the tank owner time to learn how to use SIR before the requirements pertaining to inconclusive results must be met.

(d)(4) - The requirements in this subdivision are reorganized for clarity and are made to allow more time to obtain a recalibration of the dispenser meter when necessary. The existing time allotment is insufficient to be able to schedule recalibration.

(e) -This amendment specifies that Article 5 must be complied with if a statistical inventory reconciliation report indicates a non-tight system and if the previous month's report was inconclusive or fail.

(f) - The addition of language in this subsection is for clarification only. The text implies that it is the owner or operator who reports a suspected release is the person who will conduct additional tests. This additional language makes this clear.

(h)- This amendment requires a piping tightness test or tank integrity test if a statistical inventory reconciliation report indicates inconclusive results or possible unauthorized releases. This clarification is necessary so that the correct portion of the UST system will be tested.

(j) - This amendment requires the owner or operator to report to the LIA annually, the result of statistical inventory reconciliation reports for the previous 12 months.

(k) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

ARTICLE 5. RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

Section 2650. Reporting and Recording Applicability

(d) - The word "record" was changed to "report" to account for a 1991 amendment in the UST law (AB 1954, Ch 1138), which added a new definition of unauthorized release under section 25295.5. Previously, the hazardous substance had to be stored in the tank and escape from the tank to be considered an unauthorized release. This amendment added spills or overfills that occur when a tank is being filled as a new type of unauthorized release. To be consistent with this statutory amendment, section 2650 must be changed to require release reporting, rather than recording.

(e)(1) - [redacted]

Section 2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(d) - Editorial changes are made for clarity; no new requirements are made.

(e) - This requirement was moved and combined with section 2655(e).

Section 2655. Free Product Removal Requirements

(e) - The amendment to this section requires the submittal of free product removal reports to the local agency within 45 days of confirmation of an unauthorized release. Existing language requires the report but does not specify that it must be submitted to the local agency. The local agency needs the reports to oversee cleanup. The timeframe of 45 days is proposed because this is ample time in which to compile a report and submit it to the local agency.

ARTICLE 6. UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products, technology, and procedures.

Section 2660. General Applicability of Article

(a) - This modification clarifies that any manufacturer specifications which exceed the requirements of this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) - This modification clarifies that repairs are made only following a release of product. (See also the definition of "repair.") Many activities which are considered repairs may in fact be preventive maintenance or "upgrades". Section 25296 of the H&SC places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) - This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) - This subsection is added to reference the new section which contains requirements for interior lining.

(e) - This subsection is added to reference the new section which contains requirements for bladder installation.

(f), (g), (h), and (i) - These subsections are moved from subsections (d), (e), (f), and (g) respectively. No substantive change.

(j) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) - A requirement is added that local agencies cannot approve repairs or upgrades if the tank is not sound and if the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of Federal Rule 40 CFR 281.32(d).

(l) - This language is moved from subsection 2661(f).

(m) - This language is moved from subsection 2661(g).

(n) - This language is moved from subsection 2661(j).

Section 2661. Requirements for Repairing Underground Storage Tanks

(a) - This subsection is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make the repair and place the tank back into operation without following up on cleaning up the release. Such action could be intentional or unintentional.

(b) - The first sentence in this subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) - This language is moved from subsection 2660(g) and reworded for clarity with no substantive change.

(d) - This language is moved from subsection 2661(i) with no substantive change.

(e) - This language is moved from subsection 2661(m) and reworded for clarity. In addition, language is added to comply with requirements in Federal Rule 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5.

(f) - This language is moved from subsection 2661(n) and reworded for clarity with no substantive change.

(g) - This language is moved from subsection 2661(p) with no substantive change.

Section 2662. Requirements for Upgrading Underground Storage Tanks

(a) - This subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d).

(b) - This subsection is moved from 2662(a).

(c)(1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection

method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) - This language is moved from subsection 2662(c) with no substantive change.

(e) - This language is moved from subsection 2662(b)(4).

Section 2663. Requirements for Interior Tank Lining

A new section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

(a) -

(b) - This language is moved from subsection 2661(c) with no substantive change.

(c) - This language is moved from subsection 2661(d) with no substantive change.

(d) - This language is added for reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) - This language is moved from subsection 2661(h) with no substantive change.

(f) - This language is taken from section 2661(k) and reworded to reflect reorganization with no substantive change.

(g) - This language is moved from subsection 2661(n) with no substantive change.

(h) - This language is moved from subsections 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

Section 2664. Requirements for Using Bladder Systems

For clarification, the option to upgrade tanks using bladder systems has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(a) - Language is added in this subseciton to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language in section

(b) - This requirement was moved from seciton 2662(d)(4) with no changes.

(c) - The requirement has been added to require cathodic protection for steel tanks with bladder systems and to comply with the federal upgrade requirements found in Federal Rule 40 CFR 280.21. If cathodic protection were not required, bladders would have to be removed to allow internal inspection at five or ten-year intervals. Pre-lining structural limiting criteria have been eliminated when the interior lining is capable of providing structural support.

(d) - This subsection is added to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language. where?

Section 2665. Requirements for Spill and Overfill Prevention Equipment

The requirements in this new section were moved from section 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under subsection 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements (see section 2635[b][3]).

Section 2666. Requirements for Upgrading Underground Piping

The language is moved from section 2664. The only substantive changes are in subsections (c) and (h).

(c) - This amendment requires that, not later than December 22, 1998, automatic line leak detectors must shut down the pump automatically if the leak detector fails or is disconnected. If the automatic line leak detector is disconnected intentionally or unintentionally or fails, then the piping could be operated without leak detection. To prevent this, the pump is wired into the leak detector which serves the purpose of requireing the leak detector to be fixed, and at the same time, not allowing the piping system to be used.

ARTICLE 7. CLOSURE REQUIREMENTS

Section 2670. General Applicability of Article

(f) - This amendment requires tank owners to obtain approval from the local agency for their temporary or permanent closure proposals. Existing language requires the submittal of the proposals, but not the prior approval. Prior approval is necessary to ensure that tank owners remove their tanks in accordance with state and local requirements. Also, local agencies are required to maintain tank closure information in their files. Without a record of closure approval, the files would be incomplete and out of compliance with federal requirements [40 CFR 280.74(c)].

(i) - "Decommissioned tanks" is added to this language to exempt such tanks which were taken out of service before January 1, 1984 from closure requirements. The definition of "decommissioned tanks" was included in the April 1993 proposed amendments; however, the term was inadvertently omitted from this section.

Section 2671. Temporary Closure Requirements

(b) - The requirement to continue corrosion monitoring is added because it is a federal requirement in Federal Rules 40 CFR 280.70(a) and 281.36.

(d) - This amendment adds the phrase, "over 12 months" to be consistent with federal regulations

Section 2672. Permanent Closure Requirements

(c)(2) - Subsection (b)(2) requires tanks undergoing permanent closure to be inerted. The language is repeated in subsection (c) for tanks which are being closed in place rather than

removed. This addition was necessary in order to be consistent and to ensure that the regulations are no less stringent than federal regulations [40 cfr, 280.71(c) and 281.36(b).

ARTICLE 10. PERMIT APPLICATION, QUARTERLY REPORT, AND TRADE SECRET REQUIREMENTS

Section 2710. General Applicability of Article

(b) - The word "operator" is changed to "representative" because the owner is responsible for filing the UST permit application.

Section 2711. Information and Application for Permit to Operate and Underground Storage Tank

(a)(3) - This amendment requires the name, address and telephone number of the tank representative rather than the owner or operator to be included on a permit application. This change was made to be consistent with the language in section 2710(b).

Section 2712. Permit Conditions

(b) - The requirement that records of repairs and upgrades be maintained for the life of the UST is added to comply with Federal Rules 40 CFR 280.33(f) and 281.32(e).

(h) & (i) - Two subsections are added requiring the local agency to provide the permittee with a list of written permit conditions including a condition stating that the owner and operator are subject to all applicable provisions of the law and regulations and that the permit and conditions be maintained at the facility. These requirements are added to ensure that the permit serves as a communication link between the local agency, permittee (owner) and operator. The need for this requirement was identified during negotiations with EPA regarding program compliance monitoring procedures and during local agency office visits.

(j) - The requirement that all primary containment be product-tight is added to comply with Federal Rule 40 CFR 280.32, which requires that the UST be compatible with the substance stored. The Health and Safety Code definition of "product-tight" includes the concept of "compatibility". Previously, the requirement that the UST be product-tight was only in reference to new and upgraded tanks. This revision makes it clear that all USTs must comply with the product-tight requirement.

(k) - The requirement that owners and operators ensure that spills and overfills do not occur is moved from 2635(b)(3) and 2663(b) to comply with Federal Rule 40 CFR 280.30(a). This change clarifies that the requirement applies to all USTs, not just new or upgraded tanks.

FINAL STATEMENT OF REASONS
(for changes made on April 2 and September 17, 1993) for

UNDERGROUND STORAGE TANK REGULATIONS

Statutory Background

Chapter 6.7 of Division 20 of the Health and Safety Code (H&SC) established a program for the regulation of underground storage tanks (USTs). This chapter establishes requirements for the design, construction, installation, monitoring, testing, repair and upgrade, permitting and closure of USTs as well as release reporting, investigation, and initial abatement after unauthorized releases from USTs. The State Water Resources Control Board (State Water Board) developed regulations to implement Chapter 6.7 pursuant to H&SC section 25299.3.

UST regulations originally became effective in August 1985. Amendments were made and the existing version of the regulations was adopted on August 9, 1991. On April 2, 1993, the State Water Board proposed numerous amendments to existing regulations and began a 45-day comment period which ended on May 17, 1993. A public hearing was held on June 14, 1993, at which oral and written comments were received. (A summary of those comments and the State Water Board's responses are included in the Final Statement of Reasons.)

Although many modifications have been made, they are substantially related to the original proposals and a reasonable member of the directly affected public could expect that these types of changes could be made. The proposed changes do not mandate prescriptive standards referenced in section 11346.14 of the Government Code. The specific purpose of each proposed change is explained as well as the necessity for the change. Grammatical and editorial changes are not itemized here, but are identified by underline and strikeout in the modified text.

This Final Statement of Reasons includes only those amendments made to the originally proposed text noticed on April 2, 1993.

ARTICLE 1. DEFINITION OF TERMS

Section 2611. Additional Definitions

"Bladder system" is modified to include rigid material because these systems can be constructed of both types of material.

"Compatible" is added using language in federal regulations. The term is used in the definition of membrane liner and without a definition the meaning may not be clear.

"Connected piping" is added using language in federal regulations. The term is used in the definition of "substantially beneath the surface of the ground" and without a definition, the meaning may not be clear.

"Excavation zone" is added using language in federal regulations. The term is used in section 2641 and without a definition, the meaning may not be clear.

"Existing underground storage tank" - This definition is modified to clarify which tanks are considered "existing tanks" and therefore subject to the requirements in Article 4 and all other applicable requirements. All USTs installed before 1/1/84 are considered existing tanks, and with only one exception, all tanks installed on or after that date are not existing tanks (i.e., they are "new" tanks, see below.) The exception is for motor vehicle fuel tanks over 1,100 gallons located at a farm and used for agricultural purposes. These tanks were not regulated until 1/1/87. So, such tanks installed between 1/1/84 and 1/1/87 are also considered existing tanks. The previously proposed language was vague as to this exception.

"Farm tank" is modified for clarity. Existing language can be interpreted two ways. It could be describing a combination of tanks which, together, hold no more than 1,100 gallons or it could be describing a combination of tanks which, individually, hold no more than 1,100 gallons. For some owners of farm tanks, the distinction is significant and means the difference between having regulated or unregulated tanks.

"Free product" is added using language in federal regulations. The term is used in Article 6, and without a definition, the meaning may not be clear.

"Hydraulic lift tank" was deleted from the regulations in the original proposals because the State Water Board intended to remove these tanks from the list of exempted tanks in section 2621. Because the decision has been made to include hydraulic lift tanks in the list of exemptions, the definition is reworded to agree with the federal definition and is reinstated.

"Inconclusive" is added because that term is used in the text to define results of statistical inventory reconciliation.

"Leak threshold" is amended to clarify the fact that it is not an allowable leak rate. Leak threshold is a number used to determine the leak detection ability of the test method. All leaking tanks need to be fixed regardless of the rate of the leak.

"Maintenance" is added using language in federal regulations. The term is used throughout the text of the regulations and without a definition as it applies to underground storage tanks, the meaning may not be clear.

"Manual inventory reconciliation" is modified to reflect the fact that it is used for determining if a leak has occurred and not only for investigating product loss.

"New underground storage tank" is modified to make clear that the terms "new" and "existing underground storage tank" are mutually exclusive and all encompassing of the regulated universe of tanks. This modification is made in response to concerns expressed by US EPA that the previous language could be construed as to leave a void between the two definitions and consequently allow some tanks which should be subject to new requirements comply with only the existing tank requirements.

"Operational life" is added using language in federal regulations. The term is used in Article 6 to refer to a tank's useable life. Without a definition, the meaning may not be clear.

"Person" is modified to make clear that all entities regulated under federal law are also regulated under California law. This change is made in response to US EPA concerns expressed during review of the California UST program pursuant to Federal Rule 40 CFR 281 that the statutory definition does not specifically name the same set of regulated entities.

"Release detection method" is modified at the request of EPA to include "release detection system" because that term is used in the text of the regulations.

"Repair" is added because the term is used extensively in the regulations. Provisions of Article 6 differentiate between repairs and upgrades and without a definition, the requirements for each may be misunderstood.

"Statistical inventory reconciliation" is amended for clarity.

"Statistical inventory reconciliation provider" is added because the term is used in the proposed text which may not be clear without a definition.

"Storm water or wastewater collection system" is added using language in federal regulations. These terms are used in existing language in section 2621, and without a definition, their meaning may not be clear.

"Upgrade" is added to the definitions because it is used in Article 6 to describe what tank owners are required to do to their tanks by December 22, 1998. Without a definition, the meaning of "upgrade" may be unclear.

INSERT (1)

ARTICLE 2. GENERAL PROVISIONS

Section 2620. General Intent, Content, Applicability, and Implementation of Regulations

In addition to editorial changes in subsections (b) and (d), the following modification is made to this section:

(d) - This subsection provides an overview of applicability of each article. The reference to Article 11 is added to bring this section up to date. Article 11 was added during the 1991 rulemaking, but section 2620(d) was not updated at that time.

Section 2621. Exemptions from the Regulations

In addition to a change for clarity in subsection (a)(13) and renumbering subsections (a)(15) and (a)(16), the following modifications are made:

(a) - This modification clarifies that the listed tanks are not exempt from California rules if subject to federal regulation.

(a)(3) The exemption for tanks in vaults or basements has been moved to (a)(15) so that the hydraulic lift tank exemption could be returned to its location before the proposed amendments were made. The exemption for hydraulic lift tanks is modified to include all such tanks and not only those with a capacity of under 110 gallons as specified in existing regulations.

Several commenters addressed the proposed amendment to section 2621(a)(3) which would have resulted in the regulation of all hydraulic lift tanks in California. The State Water Board has made the decision to modify this section to exempt all hydraulic lift tanks from regulation.

The decision to exempt hydraulic lift tanks is based on the following:

- They are not used for storage as that term is used in the definition of "underground storage tank" and therefore, do not fit the definition.
- The threat to human health and the environment is minimal because the tanks contain small amounts of regulated substances. The risk of contamination is relatively low in comparison to underground storage tanks which store large quantities of hazardous substances.
- They are self-monitoring. When a leak occurs, the machinery they support ceases to operate.
- The cost impact in regulating these tanks would be severe for both the owners and the implementing agencies. Owners would need to retrofit existing tanks which may be located underground under large buildings. The tanks would need to be monitored using some method other that those used for underground storage tanks because current monitoring methods are not practical for hydraulic lift tanks. The potentially overwhelmingly large number of tanks would require considerable effort on the part of implementing agencies, with little discernable environmental benefit. Regulation of these tanks would divert agency resources from other, more serious health threats.

INSERT (2)

(a)(15) - The exemption for tanks located in vaults or basements is moved from subdivision (3)

(a)(16) - The exemption for structures exempted by section 25281(x) H&SC is moved from subdivision (15).

INSERT (3)

ARTICLE 3. NEW UNDERGROUND STORAGE TANK DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS

Section 2630. General Applicability of Article

(a) - The purpose of this paragraph is to accommodate cases where tanks were installed after the effective date of the overall UST regulatory program (1/1/84), but before later, more stringent requirements were added by statutory revision. The new language eliminates the unnecessary reference to the effective date of the regulations.

Section 2631. Design and Construction Requirements for New Underground Storage Tanks

(c) - Language is added to this section to clarify that striker plates attached to the bottom of drop tubes satisfies the acquirement to have a striker plate in all USTs. Normally, striker plates are affixed to the bottom of a tank. At least one manufacturer has developed a plate which can be attached to the drop tube and provides the same protection as striker plates which meet the specifications of section 2631(c). Allowing the use of this new technology is environmentally safe and provides tank owners with an option which is less expensive than emptying and retrofitting a tank with a striker plate.

(d)(9) - This paragraph is added to meet the requirements of the federal program, as specified in Federal Rule 40 CFR 280.43, pertaining to UST systems using excavation barriers as a means of providing secondary containment. A requirement is added to ensure that secondary containment is above the ground water and not in a 25-year flood plain unless the containment and monitoring designs are for use under these conditions. The purpose is to prevent the secondary containment from being flooded.

(h) - The language added in the April proposed amendments is removed because the change is not necessary to be no less stringent than EPA requirements as originally thought.

Section 2632. Monitoring and Response Plan Requirements for New Underground Storage Tanks Constructed Pursuant to Section 2631

(c)(1)(D) - This subdivision is amended to require analysis of liquid around a tank only if necessary to determine if there has been an unauthorized release and only if the method of analysis is approved by the local agency. There are occasions when it is unnecessary to go to the expense of analyzing liquid in order to know if there has been an unauthorized release (e.g., visible leaks). Requiring approval of the local agency to use a specific method of field analysis will allow the local agency to authorize the use of methods that will work for site-specific cases.

(c)(2)(A) - This amendment specifies that continuous monitoring systems must meet the specifications of section 2643(f). Without this specificity, this language may be incorrectly interpreted to allow monitoring systems not meeting the requirements of section 2643(f) to be used.

(d)(1)(B) and (C) - Requirements are added to include the name and model number of monitoring equipment and a plot plan in monitoring program written procedures. This specificity is necessary in order for local agencies to identify monitoring equipment used by owners and operators and to identify exact locations where monitoring is conducted.

(d)(2) - Language is added to allow the LIA to approve a longer period of time in which an owner must prepare a response plan. Some tank owners may have valid reasons for needing more than 30 days to prepare such plans.

(e) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2633. Alternate Construction Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel

(d) - The requirement that the owner or operator demonstrate that the leak interception and detection system is capable of detecting a release before it escapes into the environment pertains to monitoring requirements for the system, as opposed to design and construction requirements, and is, accordingly, moved to Section 2634(d).

Section 2634. Monitoring and Response Plan Requirements for New Underground Storage Tanks Containing Motor Vehicle Fuel and Constructed Pursuant to Section 2633

(d) - Language in this subsection is moved from 2633(d). There is no change in requirements.

(d)(1)(B) - The proposed language requiring the demonstration of efficiency of a manual monitoring system has been deleted because it duplicates a requirement previously located in 2633(d) and now found in 2634(d).

Section 2635. Installation and Testing Requirements for All New Underground Storage Tanks

(a)(2)(A) - This amendment changes the requirement for cathodic protection systems to be tested under the direction of a cathodic protection tester to a requirement that they be tested by such a tester because Federal Rule 40 CFR 280.31 (b) of the federal regulations require the inspection.

(a)(5) - This amendment clarifies that interstitial monitors must either have third-party certification or be approved by the State Water Board. Because this is a monitoring device, it is required by EPA's regulations to have a third-party certification. The amendment also specifies that a tank test is not required if the tank is tested by another means deemed by the State Water Board to be equivalent to a tank integrity test.

(b)(2)(D) - The purpose of this amendment is to add a new alternative in satisfying the overfill prevention requirement. US EPA amended its "spill and overfill prevention" requirements (40 CFR 280.20(c) on April 1990 to allow additional means to satisfy the requirement. The proposed amendment makes state regulations more consistent with federal requirements.

(b)(3)(proposed) - Federal Rule 40 CFR 280.30(a) requires owners and operators to ensure that spills and overfills do not occur. This language is moved to 2712(k) to clarify that it applies to all USTs, not just new tanks.

(b)(3)(modified) - The conditions under which a local agency may waive the overfill prevention requirements have been modified to comply with Federal Rule 40 CFR 280.20(c)(2)(ii). The requirements can only be waived when inputs to the tank do not exceed 25 gallons at any one time.

Section 2636. Design, Construction, Installation, Testing, and Monitoring Requirements for Piping

(a)(1), (2) & (3) - These sections are reorganized and reworded to clarify circumstances under which exceptions may be made to the secondary containment requirement for piping. There is no change in requirements.

(a)(3)(C) - This amendment specifies that only one check valve may be located directly below and as close as practical to the suction pump. The modification was made to ensure that state regulations are no less stringent than federal regulations [(40 CFR 280.41(b)(2)].

(b) - The provisions of this subsection are moved to section 2636(a) for better organization.

(f)(1) - This amendment specifies that continuous monitoring systems must meet the specification of section 2643(f). Without this specificity, this language may be interpreted to mean that monitoring systems not meeting requirements of section 2643(f) may be used.

ARTICLE 4. EXISTING UNDERGROUND STORAGE TANK MONITORING REQUIREMENTS

Section 2640. General Applicability of Article

(d) - A new subsection is added to clarify the applicability of the farm tank monitoring option available under H&SC section 25292(b)(5)(A). That option allows farm tanks between 1,100 and 5,000 gallons to be monitored using monthly tank gauging and triennial tank testing. Federal Rule 40 CFR 280.43(b) specifies that weekly manual tank gauging can only be used on tanks up to 2,000 gallons, and that for tanks greater than 550 gallons, tank testing must be performed at least annually. Without the change, the state program would be less stringent than the federal program for this line item.

Section 2641. Monitoring Program Requirements

(a) - The proposed language regarding the farm tank monitoring option has been moved to 2640(d) and modified to reflect federal rules. Authorization is given to local agencies to reduce frequency of monitoring when environmental conditions make it impractical, physically impossible, or life threatening to conduct the monitoring. This authorization was in the 1985 version of the regulations and was omitted in error in 1991.

(i) - Existing language requires owners or operators to obtain prompt approval for their monitoring programs. "Prompt" is subjective; therefore, reference to the word is removed. The requirement to obtain local agency approval for the replacement, repair, upgrade, or closure of a tank is consistent with other regulations in this chapter.

(k) - This subsection requires owners to replace, repair, or close a tank if they discover an unauthorized release. The requirement is modified to require this action only if the unauthorized release came from the existing tank. If the contamination did not come from the existing tank, the owner should not have to replace, repair, or close it.

Section 2643. Non-Visual Monitoring/Qualitative Release Detection Methods

This section has undergone several changes and reorganization as a result of comments made by several people during the 45-day public comment period.

(b) - This subsection has requirements for 1) monthly tank monitoring for methods such as automatic tank gauges and, 2) monitoring programs consisting of annual tank testing and monthly inventory reconciliation. This subsection has been expanded to include more specific monitoring options as follows:

1) Automatic tank gauging is the same as (1) above except it is done after product delivery or when the tank is filled to within 10 percent of the highest operating level. The reason the tank owner is allowed to do the test within 10 percent of the highest operating level is so that some product dispensing can take place during the waiting period for tank stabilization.

2) Automatic tank gauging (ATG) and manual inventory reconciliation (MIR) together is a new monitoring option. MIR is required because the ATG can be performed when the level is only three feet, thus providing backup monitoring.

3) Statistical inventory reconciliation and tank testing together are a new monitoring option which is allowed because SIR and tank test methods must receive third-party evaluations for compliance with federal requirements. The specifics on SIR and tank testing are given in sections 2646.1 and 2643.1, respectively.

4) MIR and tank testing replaces 2) above. MIR is covered in section 2645 and tank testing is covered in section 2643.1. This is not a new monitoring option, but has been moved and reworded for better comprehension and organization.

5) Other test methods may be approved if they comply with section 2643(f), which requires all methods to receive third-party evaluations. The purpose of adding this option is to ensure that as technology advances, new and improved testing methods may be considered for use by tank owners.

(c) - Language is improved, redundancies removed. This is no change in the requirements.

(d) and (e) - Language is added to allow LIAs to approve a substitute test for piping which cannot be isolated for testing purposes. Without this alternative, there would be no way to test this piping.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

Section 2643.1. Tank Integrity Testing Requirements

This is a new section relating specifically to tank testing requirements.

For easier comprehension and better organization, this section brings together the requirements applicable to both volumetric and nonvolumetric tank integrity tests. There are no new requirements in this section; the language is moved from existing section 2643.

Section 2644. Non-Visual Monitoring/Qualitative Release Detection Methods

(a) - This amendment specifies that interstitial monitors must have third-party certification. This specification is made to clarify the fact that interstitial monitors are a type of qualitative release detection and to ensure compliance with standards set for other qualitative release detection methods.

Section 2645. Manual Tank Gauging and Testing for Small Tanks

(a) - This amendment is made to allow a 72-hour gauging period as indicated in Table 4.1. and to be consistent with EPA regulations.

(b) - The amendments to this subsection expand the manual tank gauging method to allow tanks between 1,001 and 2,000 gallons to be monitored without receiving a tank integrity test if the gauging period is 60 hours instead of the usual 48 hours. This change is made to allow tank owners another option for monitoring and to be consistent with EPA regulations.

(d)(1) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

(d)(3) - This amendment is made to be consistent with the changes made in subsections (a) and (b) above.

Section 2646. Manual Inventory Reconciliation

(c)(1)(D) - The requirement to use a substance on a dipstick is modified to only require the use of the substance if the product-level readings on the dipstick are otherwise illegible. It was pointed out by some local agencies that use of these substances is not always necessary to obtain accurate readings.

(f) - The purpose of this amendment is to require the tank owner or operator to record the actions taken under subsection (e) which will be available to the LIA for review.

(i) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

Section 2646.1. Statistical Inventory Reconciliation

(a) - This amendment requires the tank owner to obtain approval from the LIA before statistical inventory reconciliation may be used as a monitoring method. Some tank owners have started using it without the knowledge of the LIA and some LIA's do not allow its use in their jurisdictions.

(b) - To avoid confusion regarding the differences between manual and statistical inventory reconciliation, language describing the daily measurement requirements for statistical inventory reconciliation is replaced with a reference to the identical requirements in the section on manual inventory reconciliation. There is no change in the proposed requirements.

(c) - The purpose of the proposed amendments is to clarify what monitoring information the tank owner or operator must supply to the SIR vendor. The proposed amendment also does not require the first three reports from the SIR vendor to meet the requirements. The SIR vendor needs a certain number of data points to perform SIR. The regulations allow the tank owner to provide the minimum number of data points by using previous months' data. Also, the proposed changes allow a three-month grace period to give the tank owner time to learn how to use SIR before the requirements pertaining to inconclusive results must be met.

(d)(4) - The requirements in this subdivision are reorganized for clarity and are made to allow more time to obtain a recalibration of the dispenser meter when necessary. The existing time allotment is insufficient to be able to schedule recalibration.

(e) -This amendment specifies that Article 5 must be complied with if a statistical inventory reconciliation report indicates a non-tight system and if the previous month's report was inconclusive or fail.

(f) - The addition of language in this subsection is for clarification only. The text implies that it is the owner or operator who reports a suspected release is the person who will conduct additional tests. This additional language makes this clear.

(h)- This amendment requires a piping tightness test or tank integrity test if a statistical inventory reconciliation report indicates inconclusive results or possible unauthorized releases. This clarification is necessary so that the correct portion of the UST system will be tested.

(j) - This amendment requires the owner or operator to report to the LIA annually, the result of statistical inventory reconciliation reports for the previous 12 months.

(k) - This amendment corrects the April 93 proposal and restores the requirement which is in existing regulations in section 2646(f).

ARTICLE 5. RELEASE REPORTING AND INITIAL ABATEMENT REQUIREMENTS

Section 2650. Reporting and Recording Applicability

(d)(~~e~~) - The word "record" was changed to "report" and the words, "~~or reported~~" were added ~~respectively~~ to account for a 1991 amendment in the UST law (AB 1954, Ch 1138). This amendment added a new definition of unauthorized release under section 25295.5. Previously, the hazardous substance had to be stored in the tank and escape from the tank to be considered an unauthorized release. This amendment added spills or overfills that occur when a tank is being filled as a new type of unauthorized release. To be consistent with this statutory amendment, section 2650 must be changed to require release reporting, rather than recording.

Section 2652. Reporting, Investigation, and Initial Response Requirements for Unauthorized Releases

(d) - Editorial changes are made for clarity; no new requirements are made.

(e) - This requirement was moved and combined with section 2655(e).

Section 2655. Free Product Removal Requirements

(e) - The amendment to this section requires the submittal of free product removal reports to the local agency within 45 days of confirmation of an unauthorized release. Existing language requires the report but does not specify that it must be submitted to the local agency. The local agency needs the reports to oversee cleanup. The timeframe of 45 days is proposed because this is ample time in which to compile a report and submit it to the local agency.

ARTICLE 6. UNDERGROUND STORAGE TANK REPAIR AND UPGRADE REQUIREMENTS

Article 6 has been reorganized for clarification. In addition, changes have been made to meet federal requirements and to accommodate new products, technology, and procedures.

Section 2660. General Applicability of Article

(a) - This modification clarifies that any manufacturer specifications which exceed the requirements of this article must be complied with. This change was deemed necessary to ensure that the regulations can accommodate the wide range of repair and upgrade materials and technology now coming on the market.

(b) - This modification clarifies that repairs are made only following a release of product. (See also the definition of "repair.") Many activities which are considered repairs may in fact be preventive maintenance or "upgrades". Section 25296 of the H&SC places a number of restrictions and special conditions on repairs which occur as the result of a release, and this clarification responds to this statutory requirement.

(c) - This subsection is modified to reflect that more than one method for upgrading motor vehicle fuel tanks now exist (i.e., interior lining/cathodic protection and lining/corrosion protection/bladder).

(d) - This subsection is added to reference the new section which contains requirements for interior lining.

(e) - This subsection is added to reference the new section which contains requirements for bladder installation.

(f), (g), (h), and (i) - These subsections are moved from subsections (d), (e), (f), and (g) respectively. No substantive change.

(j) - A requirement is added that records on repairs and upgrades must be maintained at the facility or other approved location for the remaining life of the UST system or facility. This requirement is added to meet Federal Rules 40 CFR 280.33(f) and 281.32(e)

(k) - A requirement is added that local agencies cannot approve repairs or upgrades if the tank is not sound and if the repair or upgrade will not prevent releases for the tank's operational life. This is added to meet the requirements of Federal Rule 40 CFR 281.32(d).

(l) - This language is moved from subsection 2661(f).

(m) - This language is moved from subsection 2661(g).

(n) - This language is moved from subsection 2661(j).

Section 2661. Requirements for Repairing Underground Storage Tanks

(a) - This subsection is added to prevent owners or operators from repairing tanks without notifying the local agency that a release has occurred. Concern is that the owner may make the repair and place the tank back into operation without following up on cleaning up the release. Such action could be intentional or unintentional.

(b) - The first sentence in this subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d). The second sentence is moved from subsection 2661(b), and a requirement is added which directs the owner or operator to ensure that the method of repair will address the entire cause of release.

(c) - This language is moved from subsection 2660(g) and reworded for clarity with no substantive change.

(d) - This language is moved from subsection 2661(i) with no substantive change.

(e) - This language is moved from subsection 2661(m) and reworded for clarity. In addition, language is added to comply with requirements in Federal Rule 40 CFR 280.33(c). The requirements for soil sampling are eliminated because such sampling or equivalent must occur under Article 5.

(f) - This language is moved from subsection 2661(n) and reworded for clarity with no substantive change.

(g) - This language is moved from subsection 2661(p) with no substantive change.

Section 2662. Requirements for Upgrading Underground Storage Tanks

(a) - This subsection adds a procedure to carry out the requirement in Federal Rule 40 CFR 281.32(d).

(b) - This subsection is moved from 2662(a).

(c)(1) & (2) - This subsection is reorganized and renumbered to clarify that there are now two alternatives for upgrading steel USTs, the previously existing interior lining/cathodic protection method and the new bladder/lining/corrosion protection method. Requirements for lining have been moved to section 2663.

(d) - This language is moved from subsection 2662(c) with no substantive change.

(e) - This language is moved from subsection 2662(b)(4).

Section 2663. Requirements for Interior Tank Lining

A new section 2663 is added which covers interior tank lining requirements. Lining may serve as either a repair or an upgrade, but under previous organization, lining was covered under the same section as repairs. This new section clarifies general lining requirements as well as those particular to repairs and upgrades.

except a minor change as follows: (4) Sept (5)

(a) - This language is moved from section 2661(a) with no substantive change. The prior subsection (a) is moved to a new section 2665.

(b) - This language is moved from subsection 2661(c) with no substantive change.

(c) - This language is moved from subsection 2661(d) with no substantive change.

(d) - This language is added for reorganization. In previous draft, the required reinforcement actions were found in subsection 2661(i) which covered both repairs and lining. This adds no new substantive requirement for lining.

(e) - This language is moved from subsection 2661(h) with no substantive change.

(f) - This language is taken from section 2661(k) and reworded to reflect reorganization with no substantive change.

(g) - This language is moved from subsection 2661(n) with no substantive change.

(h) - This language is moved from subsections 2661(q) and 2662(b)(3). Requirement for long-term periodic monitoring has been eliminated for elective upgrades because it is not required under federal rules. Other minor changes are made related to long-term periodic inspection requirements.

Section 2664. Requirements for Using Bladder Systems

For clarification, the option to upgrade tanks using bladder systems has been moved to a separate section. With the following exceptions, no changes have been made in the requirements, which were moved from subsection 2662(d).

(a) - Language is added in this subsection to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a change but a clarification of the language in section 2662(d).

(b) - This requirement was moved from section 2662(d)(4) with no changes.

(c) - The requirement has been added to require cathodic protection for steel tanks with bladder systems and to comply with the federal upgrade requirements found in Federal Rule 40 CFR 280.21. If cathodic protection were not required, bladders would have to be removed to allow internal inspection at five or ten-year intervals. Pre-lining structural limiting criteria have been eliminated when the interior lining is capable of providing structural support.

(d) - This subsection is added to clarify that bladders may be installed only in motor vehicle fuel tanks. This is not a new requirement, but a clarification of existing language. where?

Section 2665. Requirements for Spill and Overfill Prevention Equipment

The requirements in this new section were moved from section 2663 and reworded for clarity. The requirement to use care when filling the tank is moved and consolidated under subsection 2712(k). The language regarding the overfill prevention equipment waiver is changed to meet federal requirements (see section 2635[b][3]).

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Section 2666. Requirements for Upgrading Underground Piping

The language is moved from section 2664. The only substantive changes are in subsections (c) ~~and (d)~~.

(c) - This amendment requires that, not later than December 22, 1998, automatic line leak detectors must shut down the pump automatically if the leak detector fails or is disconnected. If the automatic line leak detector is disconnected intentionally or unintentionally or fails, then the piping could be operated without leak detection. To prevent this, the pump is wired into the leak detector which serves the purpose of requiring the leak detector to be fixed, ~~and at the same time, not allowing~~ before the piping system to be used again. The shut down feature can is not required for emergency generators.

ARTICLE 7. CLOSURE REQUIREMENTS

Section 2670. General Applicability of Article

(f) - This amendment requires tank owners to obtain approval from the local agency for their temporary or permanent closure proposals. Existing language requires the submittal of the proposals, but not the prior approval. Prior approval is necessary to ensure that tank owners remove their tanks in accordance with state and local requirements. Also, local agencies are required to maintain tank closure information in their files. Without a record of closure approval, the files would be incomplete and out of compliance with federal requirements [40 CFR 280.74(c)].

(i) - "Decommissioned tanks" is added to this language to exempt such tanks which were taken out of service before January 1, 1984 from closure requirements unless required by the LA. The definition of "decommissioned tanks" was included in the April 1993 proposed amendments; however, the term was inadvertently omitted from this section.

Section 2671. Temporary Closure Requirements

INSERT 6 & 7

(b) - The requirement to continue corrosion monitoring is added because it is a federal requirement in Federal Rules 40 CFR 280.70(a) and 281.36.

(d) - This amendment adds the phrase, "over 12 months" to be consistent with federal regulations in 40 CFR 280.70(c).

INSERT (7)

Section 2672. Permanent Closure Requirements

(c)(2) - Subsection (b)(2) requires tanks undergoing permanent closure to be inerted. The language is repeated in subsection (c) for tanks which are being closed in place rather than removed. This addition was necessary in order to be consistent and to ensure that the regulations are no less stringent than federal regulations [40 cfr, 280.71(c) and 281.36(b).

ARTICLE 10. PERMIT APPLICATION, QUARTERLY REPORT, AND TRADE SECRET REQUIREMENTS

Section 2710. General Applicability of Article

(b) - The word "operator" is changed to "representative" because the owner is responsible for filing the UST permit application.

Section 2711. Information and Application for Permit to Operate and Underground Storage Tank

(a)(3) - This amendment requires the name, address and telephone number of the tank representative rather than the owner or operator to be included on a permit application. This change was made to be consistent with the language in section 2710(b).

Section 2712. Permit Conditions

(b) - The requirement that records of repairs and upgrades be maintained for the life of the UST is added to comply with Federal Rules 40 CFR 280.33(f) and 281.32(e).

(h) & (i) - Two subsections are added requiring the local agency to provide the permittee with a list of written permit conditions including a condition stating that the owner and operator are subject to all applicable provisions of the law and regulations and that the permit and conditions be maintained at the facility. These requirements are added to ensure that the permit serves as a communication link between the local agency, permittee (owner) and operator. The need for this requirement was identified during negotiations with EPA regarding program compliance monitoring procedures and during local agency office visits.

(j) - The requirement that all primary containment be product-tight is added to comply with Federal Rule 40 CFR 280.32, which requires that the UST be compatible with the substance stored. The Health and Safety Code definition of "product-tight" includes the concept of "compatibility". Previously, the requirement that the UST be product-tight was only in reference to new and upgraded tanks. This revision makes it clear that all USTs must comply with the product-tight requirement.

(k) - The requirement that owners and operators ensure that spills and overfills do not occur is moved from 2635(b)(3) and 2663(b) to comply with Federal Rule 40 CFR 280.30(a). This change clarifies that the requirement applies to all USTs, not just new or upgraded tanks.

FOR

10/5/21 Section 2643 (c) The amendments to this subsection moves the language to subsection (a) There is no change in the requirements.